

Manufacturers Record

Exponent of America



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Line Upon Line and Precept Upon Precept.

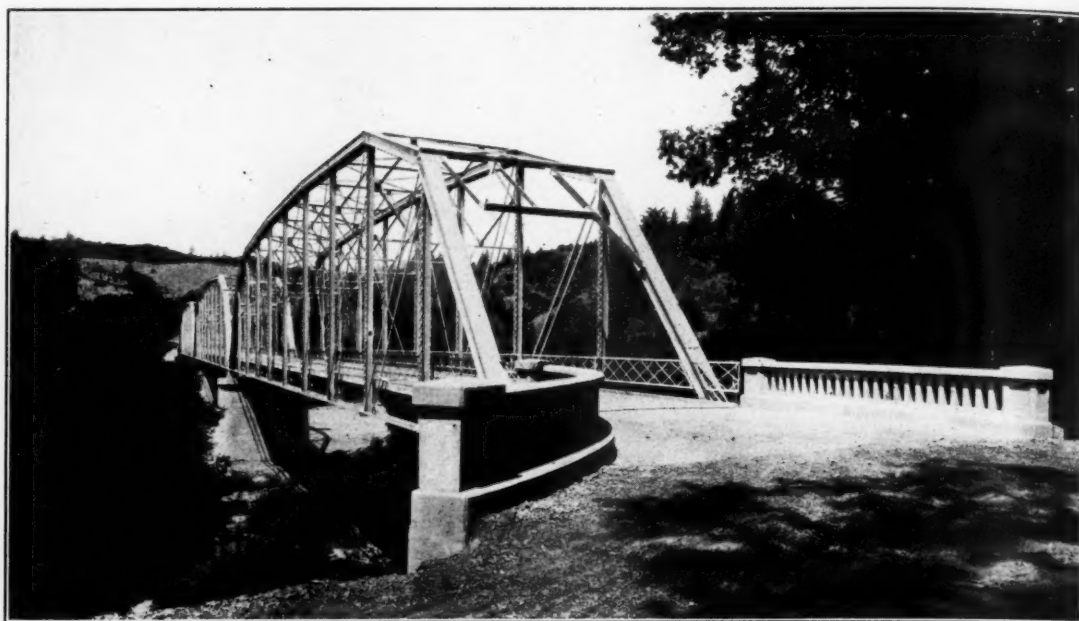
Too late for publication on the cover page last week, but never too late to be repeated and reiterated in the most conspicuous place possible, was the statement of President Harding to Congressman Mondell, published in the editorial columns of our last issue, in which President Harding, in very clear-cut sentences, struck straight home at unwise drastic financial deflation as the cause of the terrific business and agricultural depression in 1921.

President Harding's statement, which we repeat, was as follows:

"The national fiscal policy has been directed to arrest the too rapid deflation which had set in, and to this end there has been a progressive reduction of the Federal Reserve discount rate. As a result of these policies, Liberty bonds have progressively risen in value. The general financial situation has steadily improved, and today the country has a brighter prospect ahead of its business, industry and agriculture than at any time since the mistaken program of drastic deflation adopted by those who were then in control of Government policies."

Notwithstanding all the power of the big financial interests of New York to secure the re-appointment of W. P. G. Harding as the head of the Federal Reserve Board, it would not be possible for President Harding, after his arraignment of the management of the Federal Reserve Board, to re-appoint him without stultifying himself and making such an appointment the ridicule of the country. Nor could he properly appoint as governor any other man who as a member of the Board co-operated in that deflation work. Indeed, it would seem that these men, thus vigorously repudiated by the President, should immediately resign, unless they are sadly lacking in the sense of what is proper under the circumstances. This nation may, therefore, rejoice that none of the men who by unwise management of the Federal Reserve Board brought about a deflation which swept out of existence not less than thirty billion dollars of value, which bankrupted hundreds of thousands of farmers, which caused the suicide of hundreds of people driven to despair by reason of hopeless indebtedness, can possibly be appointed as Governor of the Federal Reserve Board in the light of the denunciation by President Harding of the result of that management.

Well may the country take courage. Well may the farmer once more hope for a living profit from his labors. Well may those who believe that the financial honor of the country should be above reproach, rejoice that that management, which has been overruled and denounced by the United States Circuit Courts of Oregon and Kentucky, and by the Supreme Court of the land wherever State banks have had the courage to fight its iniquitous schemes, can not again be in power. If the Federal Reserve System is to be saved to the country not only should all the men responsible for bringing on the conditions so truthfully denounced by the President be eliminated from the Board but all managers of Federal Reserve banks who have been guilty of the criminality of seeking to destroy State banks that dared to oppose the demands of the Federal Reserve System should also go. A house-cleaning is badly needed among many of the Federal Reserve banks.



*New Bridge over The Russian River at Healdsburg, Sonoma County, California.
The Foundation Company, General Contractors.*

HIGHWAY bridges remote from railroads and other facilities present special problems during construction. On account of isolation, mistakes of contractors are magnified. Plant and materials must arrive in proper sequence and, above all, the job must be manned by forces who have proved their ability to attain economy with trustworthy workmanship. There is a distinct advantage in letting a construction contract to one contractor upon whom may be placed complete responsibility for every phase of the work.

The Foundation Company renders complete service, has adequate modern plant, is backed by years of experience and refers to a long line of *satisfied clients*.

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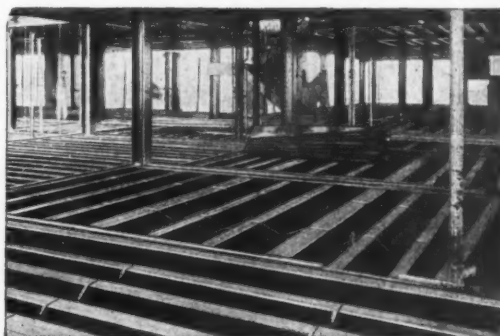
BUILDERS OF SUPERSTRUCTURES AS WELL AS SUBSTRUCTURES

Economical Floor Construction for Every Need

In Truscon floor constructions you have a complete range of all standard types of design, and may select the one best suited to your requirements. What is suitable for the heavily loaded warehouse may not be advantageous for the apartment house. Among the most popular of the Truscon Systems of construction are the Steel Floretyles and Steel Joist, here illustrated.



Kent High School, Kent, Ohio; Truscon Steel Floretyles. Mills & Millspaugh Co., Archts. Carmichael Constr. Co., Contra.



Wade Park Manor, Cleveland, Ohio; Truscon Plate Girder Joists. John Gill & Sons, Contra. Geo. B. Post & Sons, Engrs. & Archts.

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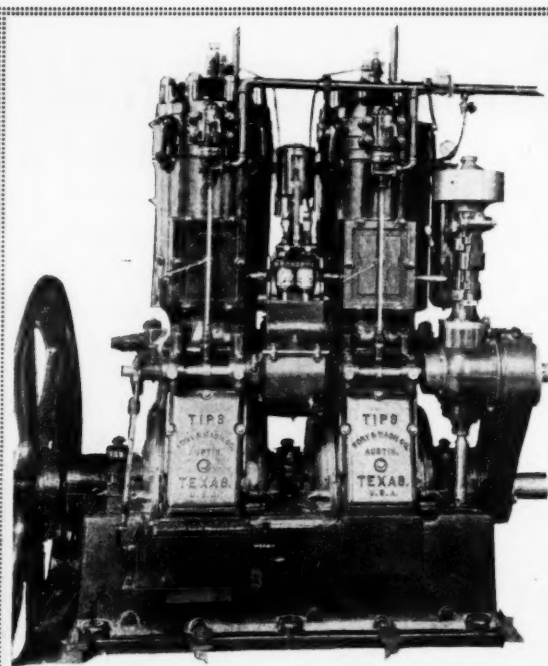
A Truscon Floor For Every Condition

In addition to Floretyles and Steel Joists, Truscon includes flat slab, beam and girder, cantilever slab, etc. Often two or more systems of construction are combined in one building to secure most economical results. Ask our engineers to show you how to secure the best construction for your work.



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Combustion and cylinder heads completely water-jacketed. Unit control of injection pumps. Hand control for slow running. Speeds for standard generators. Starting air on every cylinder. Full chrome vanadium crank.

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SINGLE VALVE, POPPET VALVE UNIFLOW, AND NON-RELEASING CORLISS ENGINES FOR YOUR POWER PLANT.

Built in sizes 100 to 1600 H.P. for rope drives, belting, or direct connection to saw mills, blowers, mine fans, generating units, air and ammonia compressors.

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If you are in the market for the above, get our prices. We are Southern Manufacturers, and not only manufacture, but guarantee our products. We want you to take advantage of our 50 years' experience.

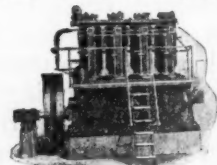
*Write us for further information
and become a satisfied customer.*

SCHOFIELD'S IRON WORKS
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THE FOOS

ARE YOU PAYING FOR A FOOS?

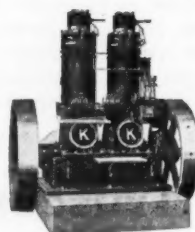
Many people are paying for a FOOS although they do not get a FOOS. They buy instead a cheaply made engine and pay more than the difference necessary in repair bills, excess fuel and upkeep costs, etc. We frequently receive the first important repair order on FOOS engines in operation almost 20 years. There is 35 years experience behind every FOOS.



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Erie City Iron Works,
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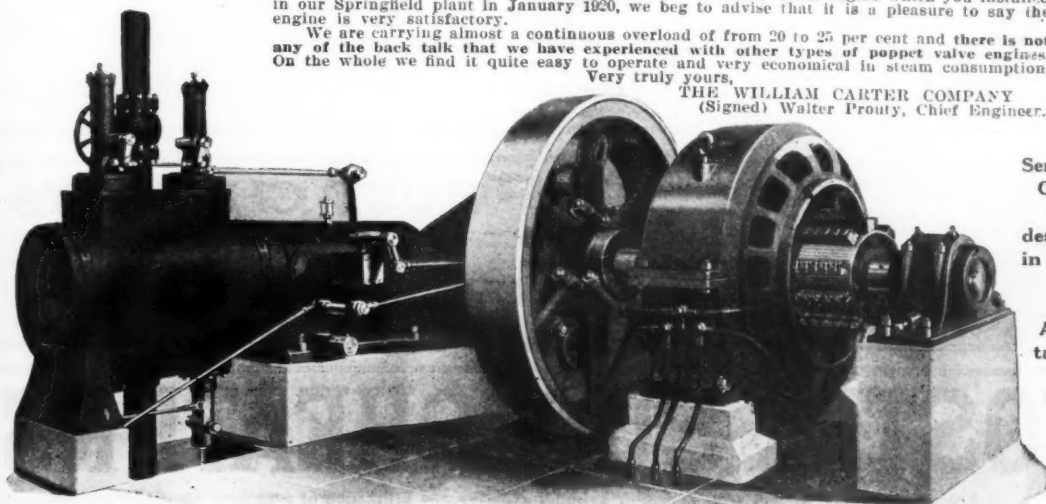
Springfield, Massachusetts,
November 1, 1921

Gentlemen:
In reply to your favor of the 31st ultimo relative to the Lentz engine which you installed in our Springfield plant in January 1920, we beg to advise that it is a pleasure to say the engine is very satisfactory.

We are carrying almost a continuous overload of from 20 to 25 per cent and there is not any of the back talk that we have experienced with other types of poppet valve engines. On the whole we find it quite easy to operate and very economical in steam consumption.

Very truly yours,

THE WILLIAM CARTER COMPANY
(Signed) Walter Prouty, Chief Engineer.

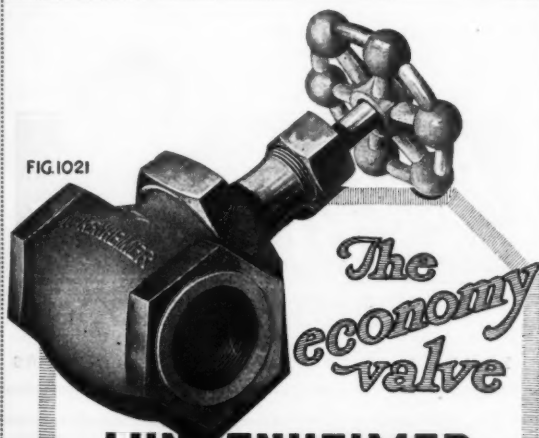


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Catalog
which
describes
in Detail
the
Many
Advantages of
the
Lentz.

ERIE CITY IRON WORKS

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FIG. 1021



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Globe, Angle and Cross Valves, and Horizontal and Angle Check Valves in sizes from 1/4 to 2 inches inclusive.

For handling cyanides, acids, and other solutions which attack bronze alloys these valves are furnished in "All Iron". Descriptive booklet No. 367. FB sent upon request.

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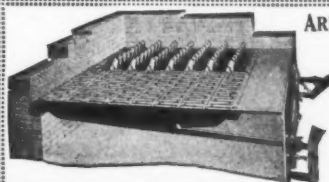
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8,000-ton Dry Dock - 1,500 and 600-ton Marine Railways
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cut fuel costs from ten to forty per cent.

—Prove it—
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May be used in any feed water and with any type of boiler. It does not deteriorate and will not evaporate or dissolve. It cannot cause "foaming" nor under normal conditions can it pass from the boiler with the steam. Booklet 80-T.

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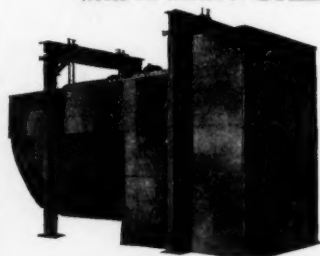
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It is singular, that the boiler room should be so often the most neglected part of the plant in the program for increased economy. In no other department of the average factory or other industrial establishment, can such profit-making economies be obtained from relatively small investment in adequate boiler room equipment and particularly in combustion appliances that will utilize more heat from the same coal, or get the same heat from less coal.

McClave Combustion Systems have in their design and construction the experience of more than forty years in developing greater economy in the burning of coal. Fifty thousand McClave Grates and Stokers are reducing production costs in thousands of plants by improving combustion economy and lowering boiler room maintenance.

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McClave COMBUSTION SYSTEMS *for greater economy*

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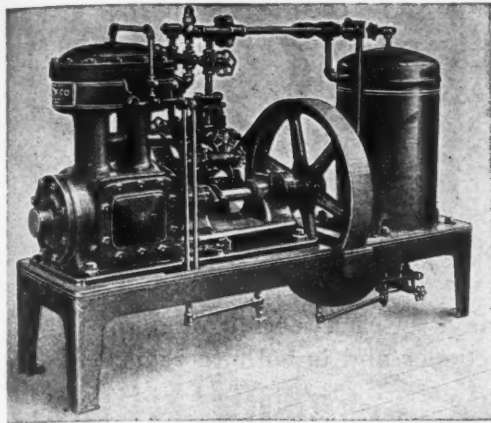
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FRICK COMBINED REFRIG- ERATING MACHINE

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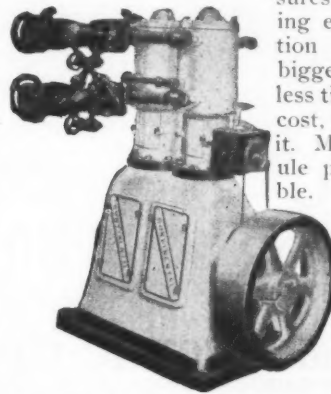
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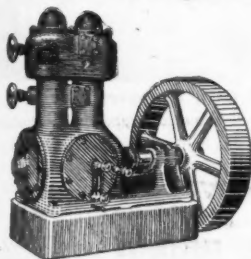
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There is a YORK Machine to meet every practical condition of Mechanical Refrigeration.

If interested in Refrigeration or the Manufacture of Ice,

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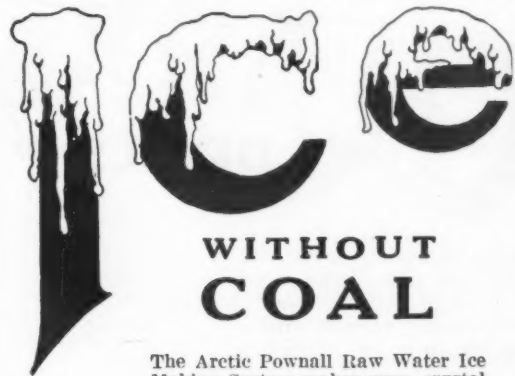
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BAKER SYSTEM REFRIGERATION

NOT to investigate the money saving possibilities of the Baker Ice Machine is an absolute disregard of those progressive principles which increase both business and profits.

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WITHOUT COAL

The Arctic Pownall Raw Water Ice Making System makes pure, crystal clear ice, using any motive power.

The ice produced is superior to that made by any other system.

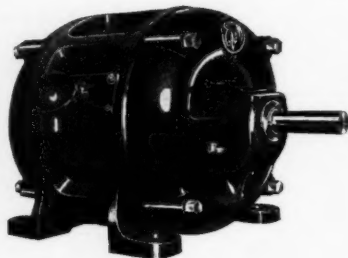
Every block is uniform in size and weight, and the tops are absolutely level.

This system also requires less labor than any other; and while the initial cost is higher, the cost of making ice with this system is far less than any other, consequently greater returns on the investment are assured.

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THE ARCTIC ICE MACHINE CO.
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MOTOR**

The upkeep cost of a motor should include not only mechanical repairs but the cost of power per horse power developed.

The Type NC Motor has more bearing surface, two oil rings for each bearing, more rugged frame, more copper and is built to reduce the Upkeep Cost.

In addition to mechanical points it has higher efficiency, power factor and torque, all of which goes towards reducing the cost of power and hence reducing the Upkeep Cost.

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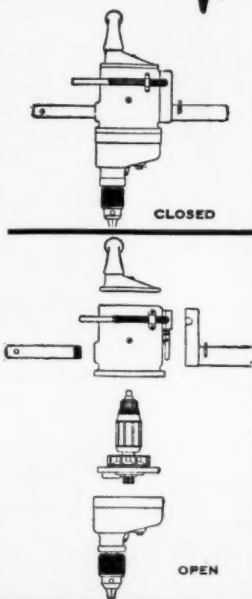
Accessibility is a vital point in the make up of a drill. The best drill needs repair and overhauling at times.

CLARK DRILLS can be "taken down" and reassembled without disturbing any electrical connections—an exclusive Clark feature.

CLARK DRILLS didn't "happen"—They are the result of 25 years' experience by the Originators of portable electric drills.

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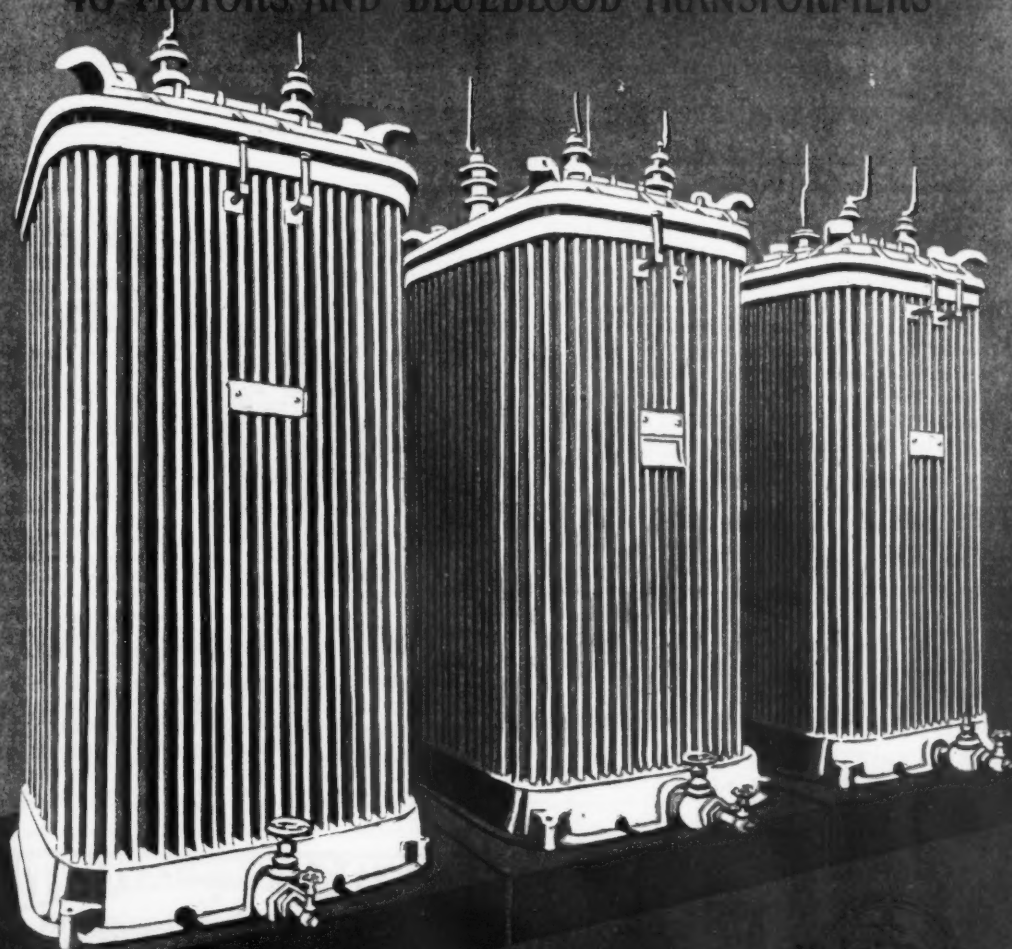
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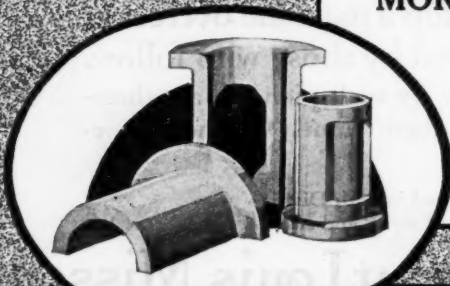
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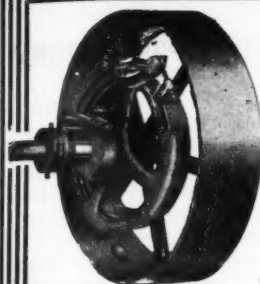
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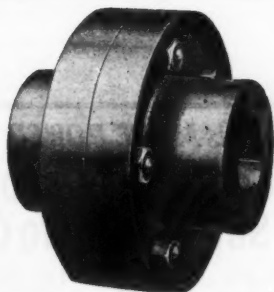
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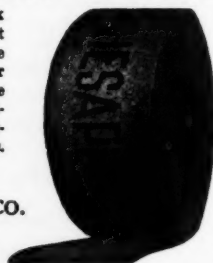
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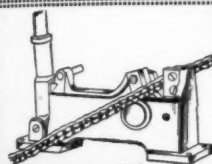
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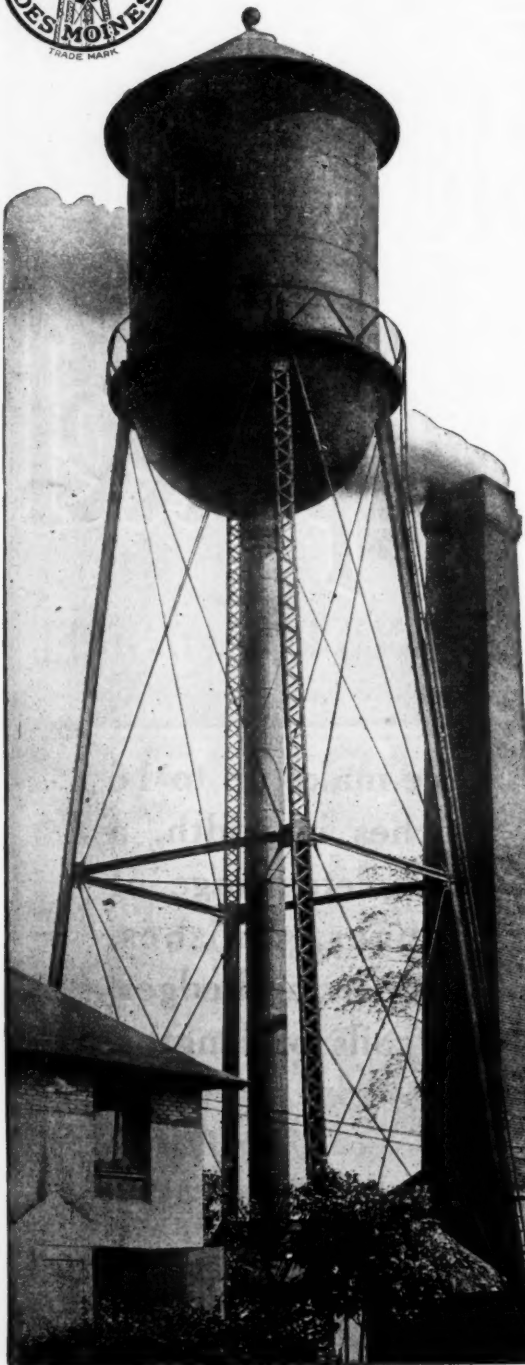
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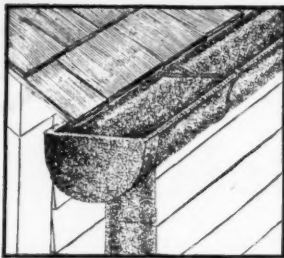
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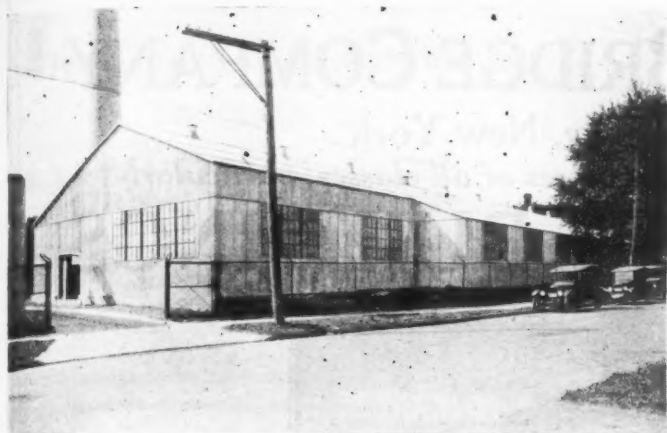
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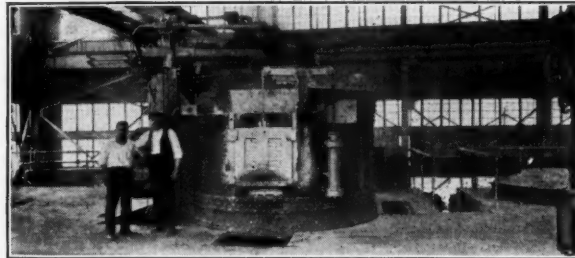
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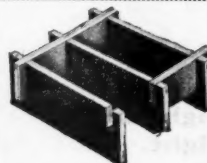
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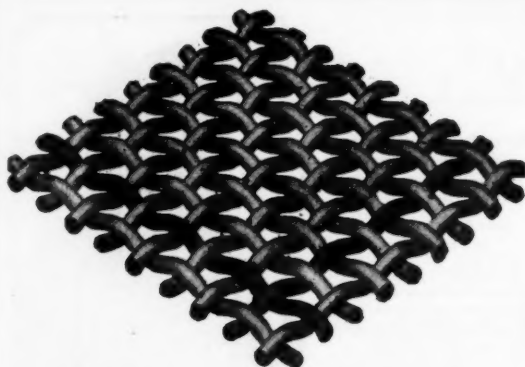
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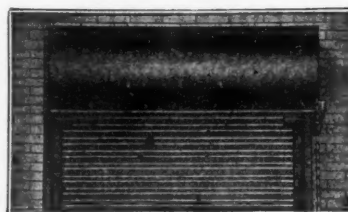


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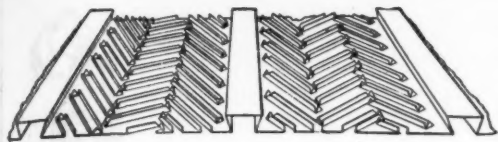
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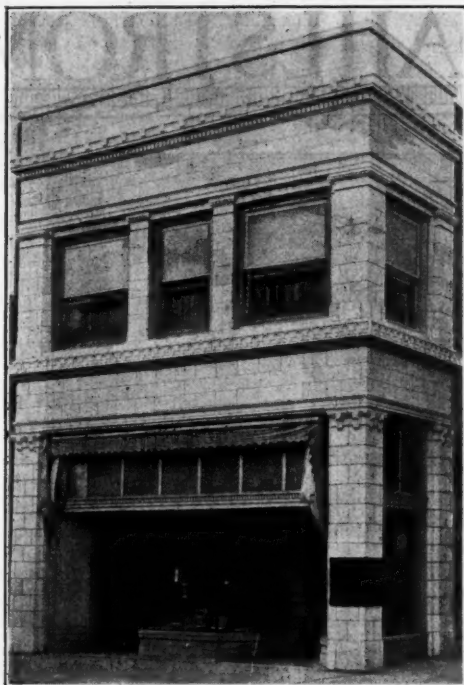
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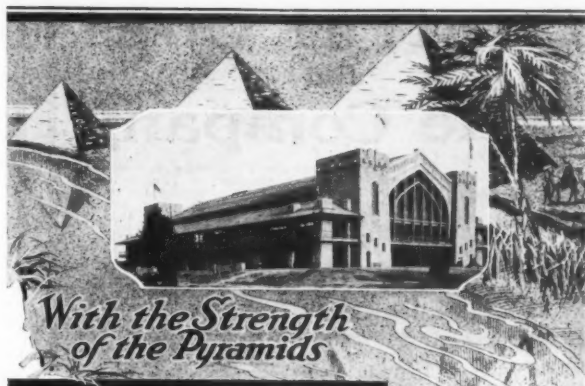
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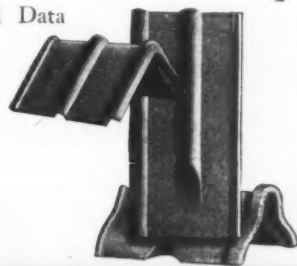
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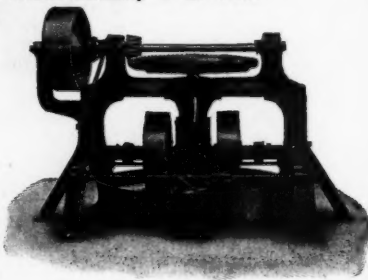
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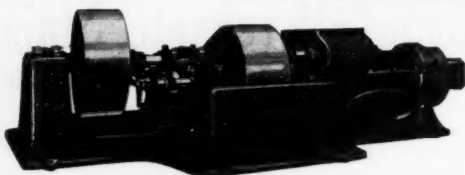
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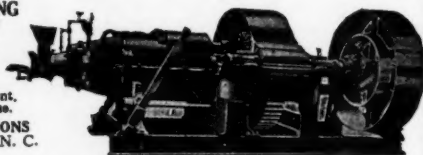
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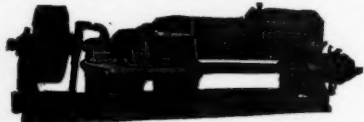
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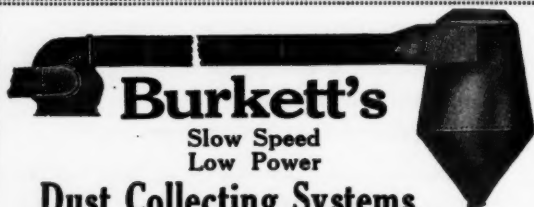
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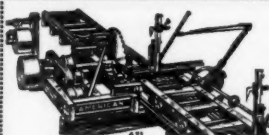
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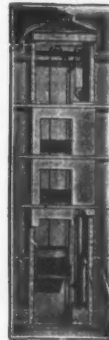
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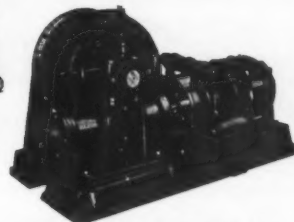
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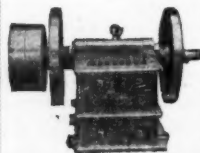
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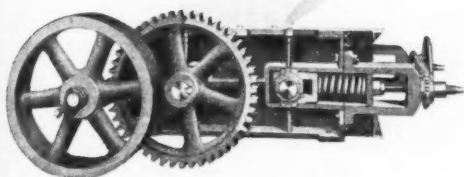
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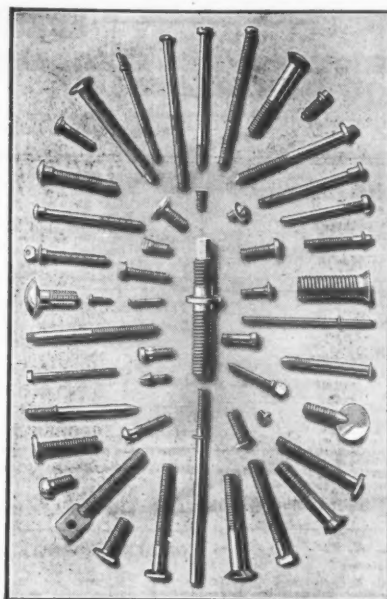
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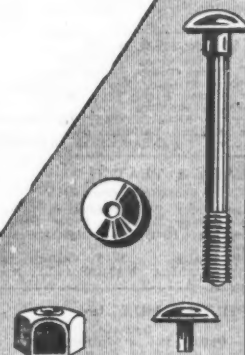
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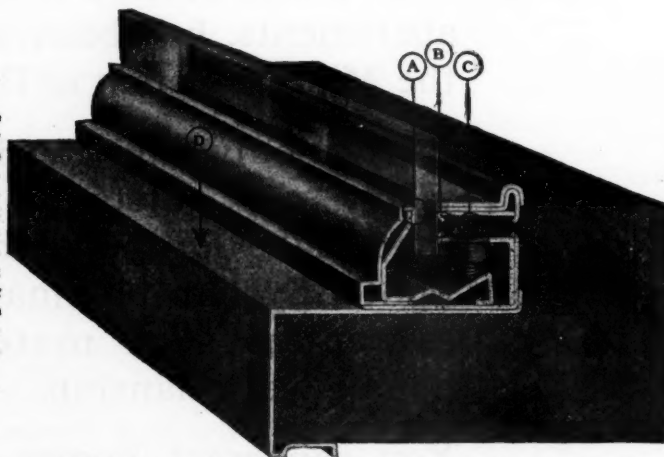
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Manufacturers Record

Exponent of America

OCTOBER 26, 1922

Volume LXXXII

Table of Contents

Number 17.

Line Upon Line and Precept Upon Precept.....Cover Page.

EDITORIALS 41-51

The League of Nations.
Is a Remarkable Potash Prophecy of 1905 to Be Fulfilled in Texas?
Chairman Lasker of the Shipping Board Should Be Asked to Resign.
Europe Should Learn from the South a Lesson of Working and Paying.
Truth from the New York Times.
The Baltimore Sun Fights Prohibition Publicly, But Privately Fights the Use of Liquors by Members of Its Own Staff.
Federal Reserve Board Governorship.
Charleston Navy Yard Required for National Defense.

Worshipping at the Shrine of the Great God Hush.
European Nations Are Treading on Dangerous Ground in Fighting Our Prohibition Laws.
Senator Frelinghuysen for Law Enforcement.
A Banker Denounces a Banker's Financial Letter.
Protection to Farm Products as Seen by a Leading Farm Paper.
Cheap and Abundant Transportation Essential to Nation's Welfare.
Wild Gambling in Europe.
Lost Time in Construction Work.
Business Activity in Orlando.

NEWS ARTICLES

The Two Per Cent Bond Issue for Bank Circulation Commended.....	By Hiram Barney	52
Amazing Congressional Cowardice in Endangering Our Chemical and Potash Industries, to Germany's Profit	By Charles Wm. Dabney, Ph. D., LL. D.	53
Promising Outlook for Development of New Oil Fields in Arkansas.....	By Tom Shiras	55
South Expending Over \$50,000,000 This Year on Apartment House and Hotel Construction.....		56
Fifth Southern Textile Exposition Great Success.....	By Howard L. Clark	61
Clay Industry of South Fostered by Broad-Visioned Railroad Management.....	By Albert Phenix	63
Southern Contracts Awarded Total Over \$409,000,000 for First Nine Months of 1922.....		64
Co-operative Marketing of Cotton.....		65

DEPARTMENTS

The Iron and Steel Situation.....	68	Construction	74
Railroads	69	Machinery, Proposals and Supplies Wanted..	82
Good Roads and Streets.....	71	New Financial Corporations.....	85
Lumber and Building Materials.....	72	New Securities	85
Commendations, Kicks and Comments.....	73	Trade Literature	86
Mechanical	73	Industrial News of Interest.....	87

PUBLISHED EVERY THURSDAY BY THE

MANUFACTURERS RECORD PUBLISHING CO., BALTIMORE, MD.

Branch Offices: New York, 30 Church St.; Chicago, 11 South La Salle St.; Boston, 734 Old South Bldg.; St. Louis, 915 Olive St.; Washington, Whaley-Eaton Service, 456-458 Munsey Building.

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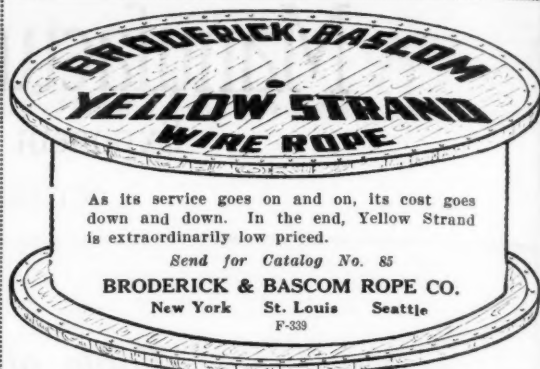
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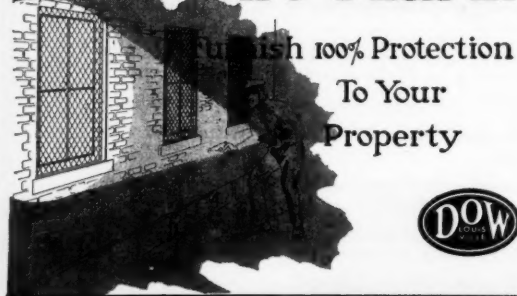
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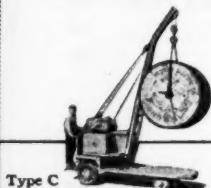
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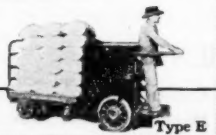
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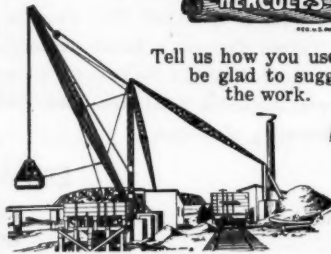


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Vol. LXXXII No. 17
WEEKLY.

BALTIMORE, OCTOBER 26, 1922

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PUBLISHED EVERY THURSDAY BY THE
MANUFACTURERS RECORD PUBLISHING CO.
Office: Manufacturers Record Building, Cor. Commerce and Water Sts.
BALTIMORE, MARYLAND

RICHARD H. EDMONDS, President
FRANK GOULD, Vice-President

VICTOR H. POWER, Treasurer
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CHAIRMAN LASKER OF THE SHIPPING BOARD SHOULD BE ASKED TO RESIGN.

CHAIRMAN LASKER, of the Shipping Board, would seem to have made himself an impossibility for longer continuance in office under this Administration; for notwithstanding the violation of the law when he first filled the Shipping Board ships with whiskey, ignoring our law, he made a speech on October 21 denouncing the action of the President, following the decision of the Attorney General, in regard to liquor on American ships.

Mr. Lasker again, as heretofore, makes his argument based on expediency of money-making, taking the ground that American ships cannot survive without the liquor traffic. In his speech he gave one illustration by saying that "the head of a great New York bank, who was to pay \$28,000 for his accommodations," cancelled his engagement for a cruise on the Mediterranean immediately after the Daugherty decision was announced. Now, if there is a president of a great bank in New York so absolutely given to liquor drinking that he is unwilling to travel on a ship where he cannot get a supply of liquors, then the directors of that bank would be very wise if they found somebody else who was willing to abide by the nation's laws.

Mr. Lasker said he "entered the Government service hoping to show that Government ownership was possible." Government ownership is possible, but not under men whose views are so diametrically opposed to the laws of this country as are Mr. Lasker's. One of his arguments was that immigrants would not come in American ships because they insisted upon having their beer and wine. It would be infinitely better for the country if such proposed immigrants would stay in the countries from which they are proposing to come. We need no more immigrants of the beer and wine drinking crowd. The country is cursed with too many of them at present. This country was not established for the purpose of being run as an open saloon for foreigners who come here. If they are not willing to abide by American laws then the sooner they decide to stay in their own countries the better it will be for us, if not for them.

IS A REMARKABLE POTASH PROPHECY OF 1905 TO BE FULFILLED IN TEXAS?

DR. CHARLES W. DABNEY, one of the best known scientists in the country, former president of the University of Tennessee and later of the University of Cincinnati, and under President Cleveland, Assistant Secretary of Agriculture, discusses in this issue the possibilities of great potash discoveries in Texas and in connection therewith points out how the cowardice of congressmen caused them to reverse their previous vote and cut from the tariff a small protection on potash.

Dr. Dabney's outline of the situation is extremely interesting, and in connection with indications of potash found in Texas it is worth while republishing a letter written to the MANUFACTURERS RECORD in 1905 by Edward Atkinson of Boston, rightly called a statistician, a philosopher and almost a prophet. This letter, written less than two months before his death, and nine years before the European war, pointed to the danger of the cutting off of our potash importations from Germany by any European war which might take place, and emphasized the need of potash discoveries in this country. Mr. Atkinson urged the investigation of the semi-arid regions of the West and Southwest by diamond drilling in search of potash, and he closed his letter with the statement: "The man who finds a potash mine corresponding to the Stassfurt will add more to the resources of this country than by the discovery of any more gold, silver, copper, or iron mines that can be added to our list. Who will start the prospectors to bore for potash?"

Mr. Atkinson's letter in full is as follows:

"I desire to call your attention to a startling fact that seldom attracts notice.

"The world may be said to depend upon the Stassfurt potash supplies of Prussia for that material, so necessary in all the arts. A war that should blockade the ports from which we get this supply of potash, even for a few months, would have a more adverse effect in stopping the vast number of important industries in this country than any other event that could occur.

"A word may be given to this discovery. Promising that potash is very soluble, and that it is leached out from salt or from potash-bearing soils or deposits, this account is of extreme interest. Mines of salt had been worked for centuries at Stassfurt and were approaching exhaustion. For some reason the owners had the impression that far below the mines that had been worked near the surface they would find another deposit of salt. They therefore bored through an intervening stratum, I believe many hundred feet thick, and did find underneath another great deposit of salt. The borings were thrown out upon the ground, then attracting no attention.

An outside chemist or geologist was attracted by them, picked them up, analyzed them and found that the potash which had been deposited with the salt had been leached and had been caught in what may be called a pan through which it was not carried away, and there for ages it had accumulated. When this discovery was made salt became of little importance, and the supply of potash, in all its refined and crude forms, took the markets of the world. We import, I believe, several million tons of kainit, one of the crude and unmanufactured forms from these mines, which is a vital and essential element in nearly all the commercial fertilizers.

"Bearing these facts in mind, let it then be considered that through the arid and semi-arid belt from the far north to the far south on this side of the Rocky Mountains, at various points west of the Mississippi, there exist potash springs, often fenced in by the cattlemen to keep their cattle from drinking these waters. Now, where there are potash springs there must be a source of potash through which the water passes, taking up the potash on its way to the surface. It follows that there must be many deposits of what may be called mineral potash in different forms throughout that great section. They must be sought by boring, and the man who finds a potash mine corresponding to the Stassfurt will add more to the resources of this country than by the discovery of any more gold, silver, copper or iron mines that can be added to our list. Who will start the prospectors to bore for potash?"

The prospectors have started to work. Hunting for all they have discovered potash in Texas, or traces of it here and there, which justify complete investigation of the great district in which these prospectors have been at work.

The United States Geological Survey is giving very close study to the Texas potash situation, and Dr. Dabney, who has for years devoted much time to a scientific study of potash questions, indicates in his letter that Texas may become a source of potash equal to all the needs of this country. But a protective tariff is essential in order that those who are investing their money in trying to find this potash shall at least not be crushed to death by the importations of German potash sold at low prices in order to defeat every American effort to produce potash.

In the light of the statements made by Dr. Dabney it is interesting to recall the fact that a very disreputable advertising campaign against a duty on potash was carried out a year or more ago through the advertising agency of N. W. Ayer & Son, an agency which has always stood high in the country, but which in this particular case undertook to furnish newspapers with reading matter purporting to be in the interest of American farmers, and denouncing any effort to secure a protection on potash.

Some of the American fertilizer people were back of this advertising, but they did not have the moral courage to permit their names to be published in connection therewith, and so the advertisements were anonymous, and the reading matter that was sent out by Ayer & Son gave no intimation that that concern was being paid by fertilizer people to flood the country with propaganda against potash; nor were the innocent readers of these advertisements and of the reading matter used by so many papers, aware of the fact that some of the large fertilizer concerns in this country are financially interested in German potash mines, and some own entire potash properties in Germany, and they were, therefore, working purely for their own selfish interests when they were seeking under the guise of philanthropic interest in the farmers' welfare to mislead the country on the question of a duty on potash. A more cowardly assault on a great industry, made anonymously through an advertising agency, has never, so far as we know, been made in this country by any industry which is supposed to be managed by men of honor and integrity; and we trust that never again will a reputable advertising agency lower the high standard which should prevail in such organizations by carrying on an anonymous campaign such as that worked on the public through Ayer & Son. In our opinion

they struck a hard blow at the honor and integrity of all advertising—a blow which no reputable newspaper or advertising agency should ever be guilty of hitting—a blow at the slogan of "Truth in Advertising," and a blow at honor and integrity in advertising, which never hide themselves by anonymity which is always the resort of a coward.

At a meeting of the Associated Business Papers, Inc., on October 13, the following resolution was adopted.

"WHEREAS, the Associated Advertising Clubs of the World have done more than any other instrumentality to eliminate unfit advertisers and advertising; to raise the standards of advertising; to increase public respect and confidence in advertising; and promoted with marked success, the ideal, of truthful, clean, construction advertising; and

WHEREAS the Associated Advertising Clubs of the World have done and are doing much to educate the general public in the economic value and practical uses of advertising; and

WHEREAS their work and principles are in harmony with the standards and practices of our own organization; be it

RESOLVED that the Associated Business Papers, Inc., regards the activities of the Associated Advertising Clubs of World, worthy of its commendation and the support of all those interested in promoting better business and better advertising."

We wonder what would be the view of the Associated Advertising Clubs of the World of such anonymous advertising as was carried on by certain fertilizer interests through Ayer & Son, including the reading matter sent out by Ayer & Son for the purpose of securing its republication as pure news matter in the newspapers of the country in an effort to besmirch the efforts to secure some protection for the potash interests of the country. That kind of cowardly anonymous advertising by selfish fertilizer interests, through a reputable agency, is the kind which we imagine all legitimate advertising clubs or organizations would vigorously denounce as not in keeping with the standards which the Associated Advertising Clubs of the World have been seeking to establish, and we rather imagine that no reputable advertising agency will again make such an advertising deal.

THE LEAGUE OF NATIONS.

THE LEAGUE OF NATIONS.—The more one studies world conditions the more clearly he is convinced that this country made an egregious blunder in not ratifying the League of Nations and going in as a member. Even if we were disposed to take a hand on settling conditions in Asia Minor we would be at a disadvantage because of the aloofness which we have adopted and pursued. On the other hand, if America belonged to the League of Nations a word from this country would do more to bring about world peace than all the conferences which the European nations have held.—Raleigh (N. C.) Biblical Recorder.

As opposed to this we would say that the more intelligent men who know the situation study the League of Nations as proposed, the more clearly they see we would have made an "egregious blunder" to enter that League. President Wilson refused to declare war against Turkey though Turkey was fighting our Allies. We therefore had no part then or now in any treaty with Turkey.

If we were in the League, we could be forced into every war in Europe or Asia, whether we so desired or not. The rotten diplomacy of France which has backed the Turk could not have been prevented by us, but the members of the League, if we were in it, could at any time force us into war, whereas we can exert a far more powerful influence if we so desire as an independent nation than as a member of the League.

Every development in Europe and Asia only serves to show the wisdom of our remaining out of the League and "keeping our powder dry." Some day we may have to fight again to save civilization and ourselves, but we must do so voluntarily and not by compulsion of any league.

Reverently this country should thank God that it was kept out of the League of Nations in the form of the proposed covenant.

EUROPE SHOULD LEARN FROM THE SOUTH A LESSON OF WORKING AND PAYING.

RESOLUTIONS adopted by associations are sometimes as interesting as they are unintelligent and unimportant. For instance, no serious attention should be given to the resolutions approved at the recent meeting of the American Bankers' Association in New York relative to the tariff. A general condemnation of the Fordney enactment, when the law itself had not been in operation a month and had had no time in which to prove itself, indicated that the gentlemen undertaking to give a verdict were more devoted to their theories than to the facts. Nor is it at all certain that banking sentiment as a whole is opposed to the good old doctrine of protection. On the contrary, the Southern Tariff Association has found Southern banks by the hundreds demanding protection and affixing their signatures to petitions urging protection.

It was well known in Europe, weeks before the event, that the meeting of bankers in New York would be used to let loose a mighty propaganda in favor of debt cancellation. We do not go so far as to say that the selection of speakers was made with this object in view, but it would not be far from the fact to assert that the principal orators, in truth, did happen to be gentlemen whose views in favor of cancellation was notorious.

The program of international financiers is based on two theories. They are:

1. Europe's debt to America cannot be paid unless the American market is thrown open to European production.
2. Europe cannot recover even if allowed free sway in the American market unless in addition, there is a cancellation or modification of debts.

There is just enough truth in each theory to give it the semblance of plausibility. There is no international economist who does not know, for instance, that the nation's ability to pay a debt to a second nation does not depend primarily on the trade between the two. To illustrate, France might find the balance against her in trade with America to be a hundred millions, but if, on the contrary, the aggregate favorable balance of her trade with China, Africa and Argentina, were a hundred and fifty millions, on the whole deal she would have fifty millions to the good. The test is not the trade balance between two nations, but the final trade balance when all foreign trade has been considered. In this connection, it must be remembered that for generations the rich nations of Europe have been investing abroad in huge amounts, many of which investments they still have, and the interest therefrom is enormous. Nor is it true that when England, say, has invested a hundred millions in India, she expects solely to take interest payments in Indian products. Her other motive is to force India to buy English products. Europe could pay the American debt without ever sending a dollar's worth of her goods to America provided Europe could create favorable trade balances in other parts of the world.

Can she find them? Why else have England and France and Italy their colonies and mandates? There is the preferential tariff system of the British Empire. The British merchant has had built up for him through centuries controlled markets, where British goods have preference. Moreover, it has only recently been discovered that when emigrants leave a country to go to a colony, taking capital with them, far from that capital being lost of the mother country, it begins immediately to create a market for the mother country's goods far greater than the said emigrants with their capital showed at home. And, as a result of the war, the Allies have acquired additional territory greater in extent than the whole of the United States.

We do not think that even one of the international bankers in New York would have favored a resolution demanding

that he forego a part of the sums due his own establishment by Europe. It requires considerable intellectual effrontery, therefore, for such bankers to suggest that the United States forgive its claims, when it is money or capital, in the banking view, not yet earned, but still subject to payment by the individual citizens of the United States. What right has the banker to say that Tom Jones of Chicago shall pay the hundred dollar note he endorsed on assurances that Europe would repay? We doubt if the bankers are willing to advocate a capital levy in the United States, to compensate for cancellation of Europe's debt. We make the prediction that if the debt should be cancelled, a capital levy or something like it, would be voted for by the American people. We have never heard that it is moral for a trustee to loan the funds in his charge and then cancel the obligation. Congress, as trustee of the funds of taxpayers, loaned trust funds to Europe. We doubt if it had, or has now, the constitutional authority to give them away.

Aside from the immorality involved in cancellation, it is not true that Europe can never repay. There are ten centuries of human toll hardened into capital in Europe. That "saved labor" is represented in churches, good roads, buildings, art, canals and the paraphernalia of civilization. So great was the start of Europe over America in this particular, that the total foreign debt would hardly, if employed for construction purposes in America, equalize construction conditions. There are counties in America, some of them as large as lesser nations in Europe, that have not a single substantial building or road.

It has been suggested that nations with a high sense of honor would cancel their domestic obligations before seeking to cancel what they owe abroad. It is true that Europe must be reborn, but it is not a physical so much as a spiritual rebirth that is required. She is burdened down by her hates, more than by her debts. And like a drunkard, sobbing for whiskey, she cries for more cash or credit, not that she may turn over a new leaf, but for another drink of the same old poison. Indeed, if the alcohol is suggested, statistics have been produced in Germany, we hear, to show that if alcohol in that nation were outlawed the saving would be sufficient to meet the reparation charge. And Lord Leverhulme lately wrote in the *MANUFACTURERS RECORD* that if Great Britain would adopt Prohibition the saving therefrom in five years would be enough to pay Britain's debt to America.

It is just on this point that the whole question of cancellation or modification of debts hinges. We think this nation by a magnificent majority would vote to surrender billions if there were warranties that the helpfulness thus extended were being used to create a Europe of new political concepts, devoted to peace.

Nor is it at all clear that cancellation would be an immediate aid to our continental debtors. They say they have no thought of quick payment, anyhow. It is new money and new credit that they want, and not one of them has shown yet a document to prove that such new money or credit would do more than aggravate the likelihood of war.

We recognize the gravity of the situation. France is everywhere being condemned as militaristic—and none detests militarism more than we do—but we sometimes wonder where Europe would be now but for the French army. Let us not forget that Trotsky all but had Warsaw. His emissaries had prepared a welcome for him in Berlin and in Italy. When civilization needed a police force as it had never needed one before, the French army was a bulwark of law and order. We cannot forget that. But neither can we forget that so long as such bulwarks are necessary in Europe, and civilization can be maintained there only at extraordinary cost, it is no place for our money, our hopes or our enthusiasms. But France has committed the great crime of

encouraging the Turks and backing them in their campaign—an unforgivable sin.

Some mistakes the world pays for endlessly. What else than disaster could have been expected when the Allies permitted a traitor to their cause, the man they had driven from his throne, to return to Greece! Once a traitor always a traitor. And then the Christian nations, when Turkish bayonets were pushing the Smyrna shambles toward Constantinople and Europe, quarreled with one another and some wished to let the monster in, only Great Britain standing in the breach to save civilization. So, too, while the monarchists openly plans a "restoration" in Germany, there are Allies that look on not unsympathetically. It is hard to help such a Europe. America can serve a great principle, never intrigue.

It is not selfishness to keep our own house in magnificent good order. It would be treason to the world as a whole to adopt policies devised to carry this nation back to the level of the distressed nations. Let there be left in the world at least one citadel of civilization and solvency against which the waves of disorder and insolvency will beat harmlessly, one lighthouse in the storm. Who doubts but that Divinity predestined America for such a purpose!

We yield to none in our sympathy for Europe. We yield to none in our desire to be helpful. To be of aid we would favor going far beyond the dictates of good business judgment. Two billions would be a cheap price for a peaceful and prosperous Europe, or fifty billions. There is a case, too, in Europe's plea that she was compelled to buy when prices were at the high, and that some adjustment on this account would be fair, though even this would be difficult to harmonize with the interests of the American taxpayers. There is, too, the record that we fought in a joint battle for the same cause. But self-destruction is not a sacrifice we are called on to make, nor have we seen any proposal yet that would not be as harmful to Europe, eventually, as to ourselves.

It is well to contemplate these thoughts: England, in the exploitation of new territory and assets acquired as a result of the war, has gained at least the equivalent of her debt to the United States, and if she develops her new resources after the manner suggested by Lord Milner will eventually by this means alone pay the entire cost of the war. France, by a similar method, can achieve the same result. They are our two principal debtors, and England is already arranging to pay in full.

For the moral good of the whole human race, for the maintenance of national credits by confidence in their integrity, as an incentive for more vigorous work of the brain of man in invention, in the development of resources, in abstinence from war and hate, in frugality and upbuilding, it is better that a generation of men challenge the world debt and meet it face to face rather than just quit. We have known an honest debt to make great men of honest persons and thus yield the world large dividends in service. Possibly the character of the world can stand some betterment. Lest any think that Europe is facing a problem beyond human endurance, let it be remembered that there is not one nation in Europe—not one—that is facing anything comparable in difficulty to what the South faced in 1865. And the South worked its way out in honor, and is the greater and the richer and the more self-reliant because it accepted and carried the burden.

TRUTH FROM THE NEW YORK TIMES.

"No matter what happens to the bootlegger, it will be less than his lawlessness, his rapacity and his utter unscrupulousness in the cheating and poisoning of his customers make him deserve. Invariably he is a liar and a thief, and often he is

a murderer. Even those who patronize him and enable him to make his huge profits detest him as the lowest and meanest of human beings."—N. Y. Times.

The New York Times has rightly characterized the bootlegger, but the bootlegger could not exist except for the bootlegger's accomplice in crime, namely, the buyer of the bootleg whiskey. Every act of lawlessness and rascality and the poisoning of his customers, and murder and thievery and lying, as reported by the Times in the discussion of the bootlegger, is made possible only by the bootlegger's co-partner, the man who buys his whiskey. No man who buys bootleg whiskey has any right to complain of the lying and thievery and murders of the bootlegger; no man who buys his whiskey has any right to detest him, for they are co-partners in the transaction, and until the man of supposed intelligence and position refuses absolutely to participate in the criminality of the bootlegger, he has no right to look upon the bootlegger in any other way than his partner and fellow citizen whose criminality is no greater than his own.

THE BALTIMORE SUN FIGHTS PROHIBITION PUBLICLY, BUT PRIVATELY FIGHTS THE USE OF LIQUORS BY MEMBERS OF ITS OWN STAFF.

THE MANUFACTURERS RECORD recently heard that the Baltimore Sun, one of the most vigorous and aggressive fighters of Prohibition among all the daily papers of the country, had a rule that members of its own force should not be allowed to drink, and with a view to learning the correctness of this report the Editor of this paper wrote to Mr. Paul Patterson, president of the A. S. Abell Company, publishers of the Sun, as follows:

"I have been greatly interested in learning that with a view to the betterment of the working conditions a rule has been established that any employee of the SUN, and I understand this includes the mechanical as well as the editorial and business departments, who is found drinking about the premises will be summarily dismissed from employment.

"While we have never had occasion to make a rule to that effect, it is practically an unwritten law around this office, and we have not had for many years in our employ any man who does drink.

"I will greatly appreciate it if you will kindly advise me if the information that I have received to the effect that the SUN has adopted the rule mentioned is entirely correct."

In reply Mr. Patterson said:

"Answering your inquiry of the 17th. While we have no formal rules governing the discipline of the Sun staff, we have had for a great many years the same unwritten law as you describe as applying to your establishment."

We congratulate the Baltimore Sun on thus vigorously opposing the use of intoxicating drinks by its own people, although it at the same time vigorously opposes the effort to prevent the use of intoxicating drinks by the people of the country.

The Sun doubtless bases its arguments against Prohibition on the ground that this is according to its view an interference with personal liberty. But it does not permit members of its own staff to have any personal liberty in the matter of drinking intoxicating beverages.

If it is a good thing for the Baltimore Sun to enforce its non-drinking requirements upon its own employees, is it not equally desirable that all other people should be kept from the curse of strong drink? The very fact that the Sun finds it wise to enforce upon its own people the discipline of refraining from the use of intoxicants should nullify its effort to uphold the liquor interests in their demand for the repeal of our Prohibition laws.

FEDERAL RESERVE BOARD GOVERNORSHIP.

DISPATCHES have been appearing in some of the newspapers to the effect that President Harding is seriously considering the appointment of Mr. Platt, now a member of the Federal Reserve Board, as Governor of that organization. It is clear that this information must be erroneous, for did not President Harding, in his letter to Mr. Mondell point out that one of the most important achievements of his Administration was "the arrest of too rapid deflation" and the reversal of "the mistaken program of drastic deflation adopted by those who were then (in 1920) in control of Government policies?"

Mr. Platt was a member of the Board when it adopted "the mistaken program." He has been one of the most fluent apologists for and defenders of it. He wanted to out-Harding Governor Harding, which was a considerable undertaking.

John Skelton Williams, formerly a member of the Federal Reserve Board, in his address in Georgia on July 14, 1921, said:

"Upon another occasion when certain policies were being discussed in the Federal Reserve Board, which were being opposed on the ground that they might result in forcing the failure or retirement from business of many small state banks throughout the country, a certain member of the Board, who has never been conspicuous for a knowledge of banking or an adequate comprehension of the difficulties which the country has had to face in the past year, spoke up and said in effect that **'IF THIS PLAN MEANS THE FAILURE OF THE SMALL STATE BANKS, THAT NEED NOT STOP IT; IN FACT, IF WE CAN'T GET RID OF THE SMALL STATE BANKS BY ANY OTHER METHOD, IT MIGHT BE AS WELL TO GET RID OF THEM THAT WAY'**—that is to say, by their failure. It was the same statesman and member of the Board who a few weeks later condoned the action of a large bank in a big city which had been discovered to have charged a valued customer the equivalent of about 200 per cent per annum interest on a loan of several hundred thousand dollars for about six months, with the remark that "all banks charge those rates, more or less." His imputation upon the character and methods of the banks of the country I resented instantly, for a large majority of our banks are operated decently, honorably and efficiently, and most of them would not countenance for a moment such interest rates as those which I deprecated, and which a colleague on the Board sought to condone or justify."

Was it Mr. Platt who made the diabolical statement quoted by Mr. Williams?

Was it Mr. Platt who thus seemed willing to have all the small state banks destroyed if there was no other way of getting rid of them?

Was it Mr. Platt who justified an interest rate of about 200 per cent per annum on a loan of several hundred thousand dollars with the remark that "all banks charge those rates more or less?" If Mr. Platt was not the man, we shall be very glad to have a denial from him for publication.

Some member of the Board made these statements in the presence of Mr. Williams. President Harding cannot afford to appoint any member of the Board as Governor without finding out who it was that thus displayed the spirit of willingness to wreck state banks in order to get rid of them and who justified a charge of about 200 per cent interest.

If President Harding has ever for one moment thought of appointing as Governor of the Federal Reserve Board any member of that Board—and we cannot believe that that is possible—then he should first find out to whom Mr. John Skelton Williams was referring.

Joint responsibility for the most disastrous financial blunder

in history rests squarely on the shoulders of Mr. Platt, who upheld Governor Harding's actions. He is tarred with the same pitch and chose the ruin-makers for his bed-fellows.

The country can take it for granted, it would appear, that President Harding is not going in one breath to denounce a program and in another honor with greater authority one of the men chiefly responsible for that program. Indeed, in view of the President's criticism, members of the Board who come within its sweeping definitions and yet do not resign must have hides impervious to bullets.

CHARLESTON NAVY YARD REQUIRED FOR NATIONAL DEFENSE.

Young Teddy Roosevelt, Assistant Secretary of the Navy, now and again exhibits flashes of the paternal form. A recent incident is in point. While Secretary Denby was in Japan, and while Roosevelt was working out economies in the administration of the Navy Department, he determined to close up the purely political navy yard at Charleston, South Carolina. That, as the country will recall, is the yard which old Ben Tillman forced upon the country when he was chairman of the Senate Committee on Naval Affairs during the first Wilson administration. To make a channel to the yard it was necessary to alter the landscape materially. At great expense a considerable area of land was eliminated. This was all to the good from the Daniels standpoint, since the more money spent in the South, the better. Young Roosevelt's proposal to shut up the Charleston yard soon encountered negative action on the part of the senators from South Carolina. They induced ten of their associates—making an even dozen in all—to sign a round robin declaring that they would oppose with their influence and their votes the President's ship subsidy bill if the Charleston yard was closed, unless the government at the same time should also close some Northern navy yard. They took this threat to Lasker, chairman of the Shipping Board. Lasker is the field agent of the ship subsidy proposal. He carried the paper to the White House, and very shortly thereafter Roosevelt received formal and written instructions from his commander-in-chief to cancel the plan for dismantling the Charleston yard. Of course, Roosevelt was peeved. Especially he resented Lasker's part in the affair. Orders being orders, he obeyed—but technically rather than in spirit. For immediately he exercised the power of the department and withdrew all ships from Charleston, leaving the yard with nothing to do. A few days thereafter Secretary Denby came home, and being more subservient, reversed his young assistant's policy, but not in an offensive way. Adroitly he brought about the creation of a board of naval officers to make a new study of navy yard needs, preserving the existing status.—San Francisco Argonaut.

The foregoing is typical of the propaganda of lies disseminated in relation to the Charleston Navy Yard.

Did young Teddy Roosevelt exhibit "flashes of the paternal form"? His father established the yard.

Is it the yard "which old Ben Tillman forced upon the country when he was Chairman of the Senate Committee on Naval Affairs during the first Wilson Administration?"

The yard was authorized in 1901, Theodore Roosevelt being President of the United States, Senator Hale, of Maine, was Chairman of the Senate Committee on Naval Affairs; Mr. Long, of Massachusetts, was Secretary of the Navy and both Houses of Congress were Republican. It was established on the recommendation of the Rogers Board, composed of some of the ablest officers in the Navy, after exhaustive study. It would be strange if the Republican party had put a \$20,000,000 Navy Yard in Charleston, S. C., for political reasons.

"To make a channel to the yard it was necessary to alter the landscape materially." The yard is on the west bank of a broad river. There is a clear channel of 30 feet of water to the open sea and the total sum ever spent on the river was \$175,000.

So much for the facts. They show that the Argonaut's misinformation was complete.

For years the British believed in centralization of navy

yards. About 1905 this policy was changed, and one result was the construction of the base at Roslyn. There, in the north of Scotland, the Great Fleet was maintained during the world war and it is not too much to say that Roslyn was a mighty factor in the final victory of the Allies. Between Hatteras and Panama, the United States has but one yard—that at Charleston. There are six north of Hatteras, a distance of less than a thousand miles. Would it be statesmanship or recklessness to abandon that one yard, the efficiency of which has never been challenged?

There have been some naval officers who verbally criticised the Charleston yard, but very few, if any, have ever dared to put such opinions in writing and stake their professional reputations on a verdict that the yard is unnecessary. No, indeed, for to do so would be to combat the opinion of the master strategist and naval writer, Admiral Mahan, and the best authorities the naval profession has produced. Of the various navy yards in the country, the Charleston yard beyond all others is the one that exists in spite of political pressure. Political opponents put it there because the national defense so required. The security of the nation demands that it be kept there.

WORSHIPPING AT THE SHRINE OF THE GREAT GOD HUSH.

SECTION 17 of the Interstate Commerce Act, as amended, provides: "Every vote and official act of the Commission, or of any division thereof, shall be entered of record, and its proceedings shall be public upon the request of any party interested."

That is the law of the land, and it has been followed for more than a quarter of a century, to the very great benefit of business, and without harm to any legitimate interest in the United States. There is no secrecy about where the members of the Commission stand on any issue that properly comes before them for a decision. Just as the justices of the Supreme Court of the United States usually put themselves on record in all cases decided by them, so that the public can never be in doubt as to the identity of the majority in the Court standing for a specified interpretation of the law, just so the Interstate Commerce Commission, regulating the transportation of the nation, is required by law to refrain from secrecy and stand forth identified before the country. Nor is it recorded that the commissioners feel it to be beneath their dignity to be required to give such pledges to the public of the righteousness and justice of their positions.

We have formerly emphasized the fact that, irrespective of policies the people of the nation may vote for in the conduct of their Government, control over the two great and fundamental elements in prosperity—finance and transportation—rests in two commissions or boards, either one of which, if it feels so inclined, can virtually nullify an Administration policy. We have reported, too, how the Harding Administration found it necessary, in so far as it could, to bring both the Federal Reserve Board and the Interstate Commerce Commission into line with its policies. This it did by moral pressure, or even by political pressure, but it might have found itself in a serious predicament had either the Commission or the Board have proved obstinate or recalcitrant.

If there is anything more important than control of transport and distribution it is control of credit. Nevertheless, the Federal Reserve Board, exercising an authority more vast than ever before possessed by any financial organization in America, declines absolutely to permit the public to have any information whatever as to the methods by which it arrives at its decisions, the vote cast on important policies, or any intimation of what drastic changes of policy it may be contemplating. It is provided in the law that there can be no change in the transportation rate without due notice

and without all parties affected having the privilege of presenting their views. Thereafter, argument having been heard, the Interstate Commerce Commission renders its decision and the affirmative or negative vote of each commissioner is formally reported. The Federal Reserve Board, on the other hand, shut up in a mausoleum, and more difficult of access than was Caesar himself, revels in secret government. Only a favored few ever know what drastic measures it is contemplating, and still fewer, if any, know by what vote its momentous decisions are reached. Its authority hangs like the sword of Damocles over the neck of prosperity, and falls without warning when the Board wills.

We wonder how many men, now bankrupt, could have saved themselves during the great disaster of ruthless deflation, had the Federal Reserve Board been compelled by law to give formal notice that it was considering restriction of credit, and if it had been compelled by law to hold hearings on that policy. Thousands of men who were caught naked might have had time to clothe themselves with defensive armor of some kind had warning been given. Instead of warning being spread broadcast, the fact is that Federal Reserve authorities had given formal assurance to such great interests as the cotton industry that no deflation was contemplated or would take place.

We are aware of the fact that the Federal Reserve Board could not be fairly expected to hold all of its deliberations in public. That is not the issue at all. No board of directors could properly administer a great corporation if every discussion of every minor issue had to be held on the town common. But the stockholders of a corporation are entitled to know what the major decisions of the board of directors are, and how they are reached. There is nothing particularly sacred about finance. It used to be taught that all government must be conducted at the feet of the great god HUSH. That was the spawning ground of secret diplomacy; of wars brought into being by intrigue; of all those ills and troubles which since the world began have come from the insistence on the part of a few men that they are wiser and better than their fellows—so wise, in fact, that the common herd must not have even an inkling of their methods of thought and administration. It is the twin brother of Bourbonism. There is in it everything antagonistic to democracy and nothing favorable to freedom and progress. So mad, indeed, have certain members of the Federal Reserve Board become, in their frantic effort to dominate the finances of the nation, that lately such men as Acting Governor Platt wrote to United States senators to intimate that it is none of the business of Congress or of the Government whether the Reserve Banks are managed economically or with Bolshevistic extravagance.

It is customary for the proponents of autocracy and finance to denounce as demagogues anybody who is public-spirited enough and brave enough to oppose their intrigue, but was it demagoguery to put into the Interstate Commerce Act the provision for publicity, which we quoted above? Certainly not. Nor would it be demagoguery if Congress now, with a full regard for the best interests of the people of all the nation, should enact a similar provision and provide in plain and clear language that the Federal Reserve Board, before changing basic policies which affect the price of every article in America and the well-being of every citizen, should be required to give formal notice that such a change was under consideration; to hold public hearings, and to make public a record of the vote of every member of the Board in deciding either for or against the proposed change. We believe that if this issue is presented in a straight-forward way to Congress the objections to it will prove so meagre and unsubstantial that both houses will vote by large majorities against secrecy and in favor of reasonable publicity.

EUROPEAN NATIONS ARE TREADING ON DANGEROUS GROUND IN FIGHTING OUR PROHIBITION LAWS.

AS we anticipated when President Harding made his ruling in regard to the elimination of all liquors on ships flying the American flag, and on foreign ships within the three mile limit of our coast, the entire liquor traffic of the world is bending every possible energy to befuddle the situation, to stir up international criticism and to induce the President to recall that decision or to make it less drastic. The pressure that is being brought to bear upon him is probably about as great as any President has ever had to face in any great public issue.

When the MANUFACTURERS RECORD a few weeks ago commended President Harding and Attorney General Daugherty for their stand in the matter, we suggested that every man who believed in upholding the laws of this country should voice his sentiment by letter or wire to the President and to the Attorney General. Many have done so, but many have taken for granted that the work has been accomplished and that no action on their part is needed, while on the other hand the liquor interests of the world are moving not earth and Heaven, but earth and Hell to find some way to force the President to change his decision.

The argument in effect is that we must abandon a principle which is for the betterment of this country and of the world, merely to satisfy the liquor interests who are making a fight to change our laws.

European countries, saved from destruction by the power of this country in the time of stress, which are still calling on us to lead them out of their difficulties, can ill afford to antagonize the moral sentiment of America merely that the wines of France and Spain and Italy, and the whiskeys of Great Britain, shall have a market in America.

If Europe is wise it will avoid the kind of criticism which is being sent forth to American papers against this action of the President, for continued criticism of this country on the Prohibition question will awaken a moral sentiment against any connection between European affairs and American interests which would not be for the good of Europe.

This country has definitely adopted Prohibition as a part of its constitution. It has passed a law for the enforcement of that constitutional amendment. The violation of that law is a criminal act, whether committed by men of high or low degree. President Harding has merely undertaken to see that that law is carried out on our ships and on the ships of foreign nations within the three mile limit.

Every effort made by foreign ship owners or by foreign governments to break down that law or to bring about its repeal, will only serve to react against foreign ships and foreign countries.

In the meantime, however, the business men of this country, the churches, and all others who value morality and the enforcement of law and order and the safeguarding of the Prohibition law which has been won for the nation after more than fifty years of ceaseless fighting, should make known their views to the President, and in every other way possible help to uphold him in his decision.

James A. Green, President of The Matthew Addy Co., iron and coal merchants of Cincinnati, in a letter to the MANUFACTURERS RECORD, referring to the cover page of October 5, says:

"Your prohibition first page is a wonder. More power to you."

SENATOR FRELINGHUYSEN FOR LAW ENFORCEMENT.

SENATOR FRELINGHUYSEN, of New Jersey, in his fight for re-election stands squarely and fairly on the maintenance of our Prohibition laws. Would that Maryland and every other State had as congressional and senatorial candidates men who had the same convictions and were willing to stand on them.

In Maryland the senatorial fight is based largely on the question as to which one of the two candidates can prove to the community that he is the "wettest." These two men seem to glory in the shame with which they announce that they are "wet." Each is afraid the other may be a little "wetter" in public estimation than he is. And so men who ought to stand for the enforcement of law and the maintenance of civilization, are going up and down the State disgracing themselves and the State of Maryland in their effort to curry favor with that element which seeks to destroy our Prohibition laws.

Senator Frelinghuysen, on the other hand, stands "four-square to every wind that blows" on this question, and in an interview in the New York Times of October 15 said:

"I voted for the Eighteenth Amendment. I voted for the Volstead act. I have no apology to make for either vote. Forty-six of the forty-eight States have ratified the Eighteenth Amendment, thus showing that my vote is in keeping with the expressed wish of the American people. I will oppose as a member of the Senate any effort to modify the Volstead act so as to allow the sale of light wines and beer. My reason for this stand is: The Eighteenth Amendment specifically prohibits intoxicating liquors. It is absurd to say that light wines and beer are not intoxicating. It may take more of them to produce intoxication than it does of whisky and brandy, but you know and I know and every man not influenced by his desire for the legalization of light wines and beer will admit that they will produce drunkenness. I took an oath of office to support the Constitution; consequently, my aiding any effort to minimize or set aside any of its expressed commands would be perjury on my part. I have no choice in the matter.

"I also believe that the American people want Prohibition. The housewives have more money with which to run their homes. The children are better clothed, the men are more alert and self-respecting than they were prior to the abolition of the saloon.

"Governor Edwards says he does not desire the return of the saloon, but that light wines and beer should be sold at every grocery store. If he and his liquor cohorts are so bitter against the saloon, why is it that every saloon keeper is supporting him? Is he in favor of light wines and beer? Is he against the Volstead act? It is because the sale of light wines and beer would be used as a cloak for the sale of stronger liquors. It would be an entering wedge into the old saloon business, possibly with a grocery store attached as a side line. I believe that the restrictions imposed by the Volstead act are necessary in order to enforce the commands of the Eighteenth Amendment."

A BANKER DENOUNCES A BANKER'S FINANCIAL LETTER.

THE vice-president of one of the leading national banks of Washington writes to this paper enclosing a copy of the October financial letter of Nelson, Cook & Co., bankers of Baltimore, and referring to the fact that that firm is a member of the Baltimore Stock Exchange, says:

"I am inclined to believe that this bulletin represents only the views of some one individual, because I cannot conceive that it in any way represents the entire Baltimore Stock Exchange. Knowing the great service that you have done to the whole country, and to the South in particular, by your fearless exposition of various matters covering a long period of years, I want to call your attention to the misstatements contained especially in the second column of this financial letter in which is advocated in reality a nullification of the 18th Amendment of the Constitution. I will not burden you with reciting them as they will show for themselves. It is, in my opinion, a part of the "wet" propaganda

that is being put out from coast to coast. It is inconceivable to me that a firm soliciting business from law-abiding people, many of whom have been trained under Christian influences, would take a chance at giving offence to such a large percentage of the best business men of the country by putting out such stuff as this."

The paragraphs to which this banker calls attention claim that the 18th Amendment has been responsible for an increase of drunkenness and urges a revision of the Volstead Act; and though Nelson, Cook & Co. have been opposed to the bonus to soldiers they express the thought that if light wines and beer could be brought back into use they would favor it "even though the taxes derived are to be used to pay a soldiers' bonus," and to this add, "the end may justify the means."

And so Nelson, Cook & Co., like many others, unwilling to see the economic and moral advantage to the nation from the suppression of the accursed liquor traffic, are willing for a portion of it—which would ultimately mean all of it—to be brought back into operation, and bitterly as they are opposed to the bonus to soldiers would be willing to yield that point and let the income from beer and wine go to the soldiers for the sake of getting the beer and wine back.

May the time never come in this country when decent, moral, law-abiding people who recognize the fearful curse of the liquor traffic, are willing to sell the soul of the nation to the breweries and wine-makers! We have had enough of the domination of politics in America by the brewers. We want no more of it.

When the American people reach a point where they are willing to sell the honor of the nation to the brewers and the wine-makers on the plea that by doing this they can get money with which to pay a bonus to soldiers they will have sunk to a degree of degradation which would mark the end of our civilization.

PROTECTION TO FARM PRODUCTS AS SEEN BY A LEADING FARM PAPER.

THE Maryland Farmer fully appreciates the value of the protective tariff for agricultural products despite the narrow-minded views of some people who undertake to claim that a tariff is of no value to farmers.

In a recent issue the Maryland Farmer said:

"The continued functioning of the War Finance Corporation and the Emergency tariff have caused a temporary check in the complete destruction of the farm interests."

And in the same editorial it said:

"For the first time in forty years farm products have received tariff protection against the ruinous competition of European and Asiatic products. With eight cents a dozen on eggs the unwholesome cheap eggs of China, which are so largely used by bakers, will keep the price of American fresh eggs at a figure that will pay cost of production. Eight cents a pound on butter will prevent the frequent glut of Danish butter that comes in shiploads to cut down the price of American butter. It will give some stability to the butter industry in the Eastern states. It may be noted that four Northern senators voted against this tariff bill and three Southern senators voted for it."

Fortunate indeed for the country, agriculturally as well as industrially, was the passage of our recent tariff bill. It is the first time in the history of tariff work that the agricultural interests of the country have been adequately recognized.

In the same issue of the Farmer there is an interesting letter pointing out the disaster which has come upon American farmers by reason of drastic deflation, and how heavy have been the losses of individual farmers in trying to provide foodstuffs for the country. Details are given showing the losses to farmers even under the best conditions, and the

position is taken that the farmers of the country in order to save themselves from further financial losses should reduce their production to the point where the market would make sure a more profitable price.

The point has often been made that when manufacturers find a heavy loss staring them in the face they reduce their output, and they would be regarded as business failures if they kept piling up an output for which they could find no present or prospective market except at a heavy loss. If they continued to produce heavily under these conditions they would soon find themselves in bankruptcy. The manufacturers, therefore, seek to curtail their production whenever there is not a present nor prospective market at a living price, though in some cases it is wiser to keep a plant running than it is to shut down completely.

The rule which is followed by manufacturers can with equally good ethics be followed by farmers. There is no reason why a farmer should produce cotton or wheat or corn or other products beyond his ability to sell them at a profit. He is not running his farm wholly from the viewpoint of philanthropy in order to furnish food to the consumer. He can only run his farm wisely when he runs it at a profit. If he is annually piling up indebtedness it would be better for him either to reduce his acres or to go into some other occupation. We are not advocating this policy except as a last resort in order to bring to their senses the financial interests of the country and the consumers of farm products in the cities, many of whom have for years unceasingly sought to break down to the lowest possible point all farm products.

The theory on which some big financial interests apparently controlled the deflation policy of this Government, until President Harding reversed the conditions, was to break down prices of farm products as a starting point on which to begin the breakdown of prices of labor, entirely ignoring the fact that farm prosperity is essential to general prosperity and that if the farming interests are gradually destroyed the country will ultimately go to ruin.

Until the nation comes fully to realize that farm prosperity is essential to the nation's prosperity; until city consumers cease to berate farmers for trying to get a living price for their products; until the buyers of cotton, for instance, in this country and abroad, cease their century-old efforts to crush the life out of the cotton grower in order to buy cheap cotton, the farmers will be fully justified in following the example of manufacturers and reduce their output to the point where the markets will take their stuff at a living price.

The protective tariff which has been put into effect, by increasing the prosperity of the industrial interests of the country, will enlarge the demand for farm products, and the rates which keep the cheaply raised products of other countries out of our markets will also help to add to farm prosperity.

SURVEY OF STATE DEBT.

A NATIONAL Survey of State Debts and Securities" is the title of a valuable reference book compiled and published by the Bank of America, New York City. It is a record and an exceedingly comprehensive analysis showing that more than 35 per cent of the total of state indebtedness has been incurred for highways, 20 per cent for waterways and harbors, more than 12 per cent for soldiers' bonus, 11 per cent for funding operations, a little less than 2 per cent for public buildings, the same for welfare institutions and a little more than 1½ per cent for education.

Do not refuse the employment which the hour brings you for one more ambitions.—Emerson.

Cheap and Abundant Transportation Essential to Nation's Welfare.

CHEAP transportation is essential in the United States. It is essential not only to progress, but even to the maintenance of the progress already achieved.

Political unity is a mere name with which to attract dreamers unless it is based on economic unity. And the key to economic unity in this country is cheap transportation. Without it the whole theory of nationalism is endangered and the skeleton of union alone remains.

A brilliant writer, after a careful study of the transportation problem in America, has stated that here on this continent we have had, for the first time in the history of the world, an experiment in nation-building on the basis of land instead of water transportation. He calls it an experiment because the success of it has not yet by any means been established. Can the railway take the place of the waterway? Is it possible to maintain land transport at rates that the traffic can bear?

Cheap transportation! We do not mean by that absolute cheapness. We mean transportation at rates which bear a reasonable relation to the value of the articles transported. A rate that would be cheap with wheat at \$2 the bushel might be prohibitive with wheat at \$1 the bushel.

It was brought out by stockraisers in Texas that the transport cost of beef from Argentina to New York was cheaper than the cost from Texas to New York. It has been possible to move lumber from Seattle to New York via the Panama Canal, down one side of a triangle and up another, at a less rate than by the direct route on one side of the triangle. Instances without number can be quoted to establish the more or less general truth that foreign countries, using ships, can move their products into the chief American markets at less cost than American producers can move competitive products into the same markets.

Talk about equal opportunities for American producers in the foreign trade! Why, they are not on an equality, in many instances, right here in their own natural market, with these same foreign competitors. Fortunately the new tariff law is tending, in some particulars, to overcome this impossible situation. The protective tariff, as a matter of fact, was a necessity if only to "protect" our transportation rates.

It may be laid down as a fundamental that no transportation machinery will ever be adequate or satisfactory in this country unless it will do this one thing, and do it surely: Put American products into American markets at lower rates than trans-ocean countries can put competitive products into American markets. If steam railroads cannot do that, then some substitute for steam railroads will have to be found. The railroads of the country, in other words, have reached that point in their development when it is not a question of competition with our domestic waterways, or with each other, but competition with the transport system of every other country on earth that has products to sell and uses the water highways to transport them.

It is well to recollect, too, that the transport cost must be reckoned not only in terms of money, but also in terms of service. Unless the facilities are adequate, unless there is the capacity to handle the business offering and handle it promptly, any rate is expensive. Conversely, efficient service may compensate to some extent for absolute cost of transport.

Case after case is recorded where shipments of perishable foods have brought the shipper no return whatever, except a notice that the sales price was not sufficient to pay the freight. That is a condition which might happen as a result of a surplus market, lack of demand for the product, or a

dozen other reasons. But when it is a more or less regular happening, and the reason for it is demonstrably not the price the shipper receives but the high rate the carrier exacts, then it is clear that a fundamental menace to national prosperity has been discovered and some remedy therefor must be evolved.

We have before us a letter from one of the large fertilizer companies of the Atlantic coast. "What are our truck farmers going to do," the writer asks. "Last year, although their products brought fair prices, they got little or nothing. The freight rates ate the profits up. They found they were planting not for themselves but for the railroad companies. They are reducing acreage or abandoning trucking altogether." And it is asked plaintively if something cannot be done.

Well, what can be done? The expense of all railroading has been regulated up to the skies by the Government. New construction has virtually been abandoned. Who ever hears in these days of a new trunk line being built? It is against the law to build a new railway system unless the Government finds that it is a public necessity. And who, anyhow, would build a new railroad when his possible profits therefrom, after all the risk of construction, are limited by law? Competition also has been outlawed. If a railroad, such as the Illinois Central, modernizes its line so that the cost per ton mile of moving freight is splendidly lowered, it is prohibited by law from permitting the public to share in the saving thus brought about by efficiency. It must keep its rates up to what competitive lines require. Mr. Ford, by great efficiency, can reduce the price of his motor cars when and how he pleases, but if Mr. Ford undertakes to reduce the price of transport on his railroad he is bluntly informed from Washington that he cannot do it. The more inefficient the management of one railroad system, the more the public must pay on every other system, for the permissible rates are based on a reasonable return on the bulk railroad investment, or value. A great executive who could introduce such efficiency as to cut the freight cost on his railroad in half would, under the existing dispensation, be a sort of public enemy, in the eyes of the Government. He would be suspected of ulterior and selfish designs, particularly if he tried to pass the benefits on to the public. That is the condition government regulation has brought about, and the worst is not yet.

For more than a generation, the Government, as a matter of fact, has put investors on notice that the purchase of railroad securities was a gambler's risk. Therefore, when the roads ought to have been spending \$5,000,000,000 for extensions in addition to the usual annual improvements, Mr. Hill, for suggesting such a thing, was branded by some as visionary and when Cassatt began his enormous outlay on the Pennsylvania Railroad some bankers and some newspapers intimated that he was mentally unbalanced. The wonder is not that the machinery of transport clogged during the war, but that it is not clogged all the time.

The agricultural interests are preparing now to make a united demand this winter for lower rates. They are going to be able to establish, to the satisfaction of any intelligent man, that existing rates are in many instances almost confiscatory. They will be able to show, if they want to take that point of view, that while the railroad investment is being protected by statutory assurance of a "reasonable return," the capital represented by farm ownership is in many sections not only not securing any interest return whatever but is actually being dissipated and wiped out of existence by prohibitory rates. To illustrate, a farm that might be worth \$30,000 if the markets were accessible, might not be worth

\$2000 if high freight rates made the markets inaccessible. Yet purchasers acquired such farms on the implied promise of "reasonable rates." The farmers, in other words, will demand that the theory of "reasonableness" shall be made applicable to the rates the farmers pay as well as to the rates the railroads get.

That is fair argument and incontrovertible. Nevertheless, the vicious circle begins to turn and another disagreeable fact intrudes: If the railroads do not get a reasonable return, they cannot get the money to maintain their properties. The service will get worse and worse, and the ultimate cost to the public higher and higher. Moreover, the roads cannot pay all the charges the Government insists they shall pay, under regulation, if there is a diminution of income. There is, of course, a point where lowered rates induce a sufficient increase in volume of traffic to more than compensate for the loss in unit returns. In the matter of heavy commodities, particularly in farm products, we do not believe that point has been reached. We are convinced that rates can be lowered and net income be increased, at one and the same time. Volume is the great enemy of high costs.

Moreover, here again we run across the devastating results of unscientific deflation, for deflating one part of the economic structure and only partly deflating another always throws the scales out of balance and creates problems almost too intricate for solution. To paraphrase Lincoln, the nation cannot survive half deflated and half not deflated. That means, in political language, that either prices for farm products are going up or railroad rates are coming down not by natural law, but by edict of Congress.

We have had twenty-five years of palliatives and never the sober suggestion of a cure. Perhaps there never will be a cure, since the voters or the politicians seem to insist on government interference, with its invariable concomitants of bureaucracy, inefficiency and costliness. In that event, the ultimate outcome will be government ownership and direction, deficits being met out of the public treasury. For once the Government does actually own the roads—an almost inconceivable calamity—it will give cheap rates, for the economic preservation of the Union, no matter what subsidies result.

We are not among those, however, who are convinced that no fundamental cure is possible. On the contrary, we regard such a cure as inevitable, not immediately, but through a period of comparatively rapid evolution. The five great constructive factors that manifest themselves are (1) Invention; (2) Waterpower; (3) Electrification; (4) Waterways, and (5) Motor Transport. We place invention first, because it is the age of ingenuity and so rapid are the accomplishments of the human mind that in industry after industry it often happens that a new factory is hardly finished before its machinery is antiquated. Invention revolutionized urban transport conditions in a decade. Some chemist in a lonely laboratory may solve the transport problem by operating on an atom. There is an adage that necessity is the mother of invention.

Waterpower and electrification go hand in hand. There is enough undeveloped waterpower on the continent to furnish electric power for complete operation of every railroad in the nation, not taking into account the possible utilization of the tides. The French have been making amazing progress in their studies of tidal power and may yet hitch the moon to their locomotives. Electrification, with cheap power, would put the nation back on a proper transport-cost basis, provided the substitution of new for old equipment were gradually brought about.

The most prompt relief in sight, however, is through development of the waterways. We can meet the sea competition of foreign nations by development of the marvelous waterway system at hand. That is why every farmer, no matter where

he lives, should be an ardent supporter of the scheme to join the Great Lakes to tidewater. That in itself would not only add to the value of every acre of wheat land in the Northwest, developing an increment that would compensate many times over for the whole cost of the undertaking, but it would relieve the strain on the railroads. Farmers and all others should likewise insist upon the full improvement of the Ohio, the Mississippi, the Tennessee, the Warrior and every other river where water transportation can be made to lessen the strain upon the railroads already heavily overburdened with traffic. For the same reason our highways should be extended as rapidly as possible in order to increase motor traffic. Moreover, by a combination of rail and water routes, it would be possible to give transcontinental rates of heavy commodities that would be acceptable. To illustrate, lumber from the West coast to the East could take to the water some 1500 miles west of Boston.

Motor transport is already solving the inter-city freight problem in the densely populated sections. Numbers of farms, also, in the East ship their products in their own trucks to market, avoiding any use of the railroads whatever. But the use of trucks for long hauls is not now feasible. The trucking industry from Norfolk down to Florida ought to be able to use ships for traffic to the Eastern markets. That has been a favorite method of shipment from Norfolk for years, and it ought to be equally successful from points further South.

The railroad problem is more than a present question of reasonable return. It has a thousand ramifications, each one intricate and confusing. But the fundamental proposition is as we have stated it. The purpose and the function of railroads is to assure economic unity throughout the country, assuring comparatively cheap transport for the products of every part of America to every other part of America where such products are in demand. Men may differ as to how, in view of the difficulties, they can again be made to perform that function properly, but none differ as to the objective. Every business man knows we must have cheaper transportation. The question is, "How?"

Meantime, the agricultural interests are quite right in preparing to open an immediate fight for relief of some sort by next spring.

WILD GAMBLING IN EUROPE.

ONE of the leading business men of the United States, who for years has been a large exporter to Europe, writing to the MANUFACTURERS RECORD from Paris under date of September 5, encloses clippings from two papers published in France which he says set forth in true light the situation in regard to reckless expenditures which are being made by certain classes in Europe, regardless of the present serious financial situation. The degree of reckless expenditures in London, he said, simply astounded him, far exceeding anything he had ever seen in America, even in the most fashionable winter and summer resorts; and in France is to be seen the same wild spirit of expenditures by French people and visitors from other countries. He adds:

"My observations abroad, which cover a period of over sixteen months during the years 1919, 1920 and 1922, strongly indicate that instead of economic and financial conditions being on the mend, they are in a far more difficult and unsettled condition than they were a year ago."

One of the clippings is a dispatch from Deauville, which reads:

"Money is the cheapest thing in Deauville amid the seething whirl of flamingly jewelled, diaphanously clad women mingling with beflannelled men in gigantic motor cars. Never before has Deauville experienced such an influx of notable visitors, ranging from royalty to millionaires, with Americans largely in evidence, and the French, British, Italian and South American elements well represented. * *

* * Baccarat and chemin-de-fer tables have been higher in isolated cases in other years, but never have there been so many tables in play as this season, and the average betting establishes a new record. Twenty million francs—roughly \$2,000,000—sets the top total bet during one session of the Casino, from 2 p. m. to 8 a. m."

The names of many of the bettors, included people of prominence in Europe and America, are given in detail, though the writer adds:

"Alongside the millionaires sat half-clad, notorious demi-mondaines, fingering big packets of notes in bejewelled fingers; sport-collared professional dancers with bunches of currency stuck in platinum cigarette cases, and race track followers and bookmakers who had cleaned up at the track and were tempting fortune with cards.

"The electric, money-laden atmosphere of Deauville is reinforced by excitement of gambling and plenty of champagne and cocktails, obviating the necessity of sleep. Although lingering devotees remain until 7 or 8 a. m. they are content with four or five hours sleep, joining the rest of the colony on the beach before noon.

"Bathing girls are no longer the attraction as women are generally scantier clad in the Casino and the restaurants than when in swimming.

"It is the race track after luncheon, then dinner and the Casino until after daybreak, with intermissions for dancing completing the daily schedule."

The other clipping is from the Paris edition of the Herald, and is likewise from Deauville, and says:

"The gambling is much higher than last year, and money is nightly shovelled off the tables into big baskets with no more care than if it were coal. * * * The women play with an abandon that rivals that of the men."

This world-wide spirit of gambling and wild dissipation is probably more pronounced than ever before in modern times. And yet on the other hand there is the appalling poverty of millions of people who are suffering for food and clothes; millions who will scarcely live through the winter, if reports from the East are correct, for lack of fuel and food. On one side the reckless, wild expenditure of people who are lost to all sense of responsibility to God and to their fellowmen, and on the other side appalling poverty!

LOST TIME IN CONSTRUCTION WORK.

LOST time in construction, winter hibernating, weather delays, and other causes cut down the construction year to an average of 100 working days, states the Engineering News-Record. In a series of articles on the subject, C. S. Hill calls attention to the fact that engineering construction is from 25 to 30 per cent efficient in utilization of time. He states that modern construction operations and road paving are, on the average, carried on only about one day in every three or four calendar working days, and that generally, construction is discontinued from October to May of each year. To remedy this condition, he says, is a task for nation-wide effort of engineers and contractors.

Higher cost of winter construction is probably the chief reason for cessation of practically all construction operations in cold weather. Mr. Hill says there is a further reason and makes an interesting suggestion of a condition that should be overcome. He writes:

"Construction is an exacting task for those who direct operations; regular hours are unknown and if difficulties arise long periods of continuous work and worry are required. After a crowded summer's work, construction managers frankly demand a season of comparative inactivity. The custom of not carrying on construction in winter has led the industries which supply construction materials—brick, crushed stone and gravel—also to discontinue or curtail production during the idle season. It is these last two facts which explain the practice of reducing winter construction

operations in the Southern states where cold weather does not prevent activity."

It is bad enough for the Northern states partly through force of habit or through following an established custom and through weather conditions to stop construction work in winter. There is some excuse to be found in the higher cost of construction and greater difficulties to overcome in outdoor work in zero weather.

For the Southern states, however, to cease construction activities in winter from force of habit, or because other sections of the country do so, is inexcusable. Industry and agriculture are especially favored in the South because of its mild climate. More and more manufacturers of the North and West, and Western farmers are taking advantage of the fact that in the South ice and snow play no part in shutting down operations and curtailing profits. Their capital is being invested where it will work twelve months in the year and not have to carry a five or six month over-head of idleness.

What is being done in industry and agriculture in the South can be done in the construction field. Farmers of the West are increasingly turning to the South where they are opening farms, and in Florida and other Gulf States much winter farming is done by Western farmers, while their home lands are frozen up.

Constructors and construction interests should break their trade habit of hibernating in the winter and turn their attention to the wonderful field for winter construction work in the South. In Florida and the lower Southern states many Western and Northern carpenters and construction workers are to be found engaged in their trade during the winter months. Activity of this kind has been increasing year after year. Engineers and contractors, if they will, can break the inefficient, uneconomic habit of the industry of losing five or six months in the year and make in the construction industry full time instead of only part time.

BUSINESS ACTIVITY IN ORLANDO.

Orlando, Fla., Oct. 3, 1922.

Editor Manufacturers Record:

I certainly enjoy the MANUFACTURERS RECORD, it is so thorough and unprejudiced. I see in every number developments and buildings here in Florida spoken of which I never heard of, and on inquiring find in every instance they are true. The first instance of foreign capital of any amount being invested occurred two weeks since, when McCrory, of 10c store fame, paid \$2500 per front foot for 70 feet on Orange avenue, and, it is reported, expects to erect a twelve story building to sell everything needed in any line. A few days later one of our citizens paid \$50,000 for 48 feet on a side street. Still another, for 40 feet a block away from the post office on a side street, paid \$35,000. Work began Saturday last on a causeway from north end of Orange avenue across Lake Ivanhoe to the Winter Park. Sand will be pumped out of the lake to fill in from causeway to present bank of lake to make a park.

We have \$8,000,000 in four banks, practically all Orlando money, as Winter Park, four miles north has two banks; Kissimmee, seventeen miles south, two banks; Apopka, thirteen miles northwest, one; Ocala, twelve miles west, one; Winter Garden, fifteen miles west, two.

I have traveled for ten years from New York and Michigan to Florida, and as far west as Nebraska, and never saw a town of double the population with as much business the year round. When you are next in Florida be sure and come to see Orlando.

W. A. DADE.

The editor of the MANUFACTURERS RECORD can personally bear testimony to the truly amazing development of Orlando. Moreover, it is one of the most beautiful towns in America, whose people are untiring in their efforts to add to its many attractions by improving their yards and keeping their superbly paved streets clean, thus making a profound impression upon every visitor and stimulating each other to still greater activity.

The Two Per-Cent Bond Issue for Bank Circulation Commended.

CAN THE WORLD BE FINANCED ON THE BASIS OF WORLD INDEBTEDNESS?

New York, October 16, 1922.

Editor Manufacturers Record:

I have been away and on my return, on looking over a recent copy of the MANUFACTURERS RECORD I am happy to see your article advocating the refunding of part of our national debt with a one billion dollar issue of two per cent bonds carrying with them circulating privileges.

One of our greatest national assets—the Panama Canal—was built with such bonds, and they were so valuable because of the circulating privileges that at one time they commanded a price as high as 130. Doubtless you will recall that the Roosevelt Administration and the country at large congratulated themselves upon the magnificent success of this financing. I do not know how high the quotations went on the United States Government four per cent bonds which also carried with them circulating privileges.

You will see this referred to in my article which you published in the MANUFACTURERS RECORD last December 8th, in connection with my advocacy of the use of the allied debt in a similar way to help re-establish international exchange and commerce by granting to the bank proposed in that article the right to issue currency against allied debts, wherein I pointed out that such currency would have less inflation in it than a great part of the currency then circulating under the existing laws of the United States.

The laws under which currency is issuable against the Panama Canal two per cent bonds, the two per cent Consols of 1930 and the four per cent loan of 1925, require no gold reserve but merely provide for a tax of one-half of one per cent in the case of the two per cent bonds and one per cent in the case of the four per cent bonds, and permit of the issuance of currency to the extent of 100 per cent of the face value of the bonds. The proposal contained in my article above referred to permits of the issuance of currency to the extent of only 35 per cent of the face value of the allied debts, requires that there shall be 22 per cent of gold reserve back of this currency and also requires that such currency shall not be issued except for the purchase and for stabilization of foreign exchange and for the issuance of foreign or domestic credits in connection with international financial and commercial transactions, and further provides various means for the prompt retirement of the currency.

Based on these proposals The American Exporters and Importers Association adopted resolutions and tentatively approved in principle a detailed plan for carrying them out, which is appended to the printed copy of their resolutions of December 13, 1921, which I herewith enclose. Commenting on the resolutions of the American Exporters and Importers Association, one of the experts of the International Chamber of Commerce in Paris, to whom they were submitted, said, in part:

"It would regulate the question of the interallied debts by perpetuating each debt and by directing its amount to productive operations. * * * The operations of issuance would be limited very wisely to the amounts necessary for the stabilization of exchange. The bank would operate as a central 'gold exchange office' and could, either at one stroke or progressively (at least within the limits of its reserve), re-establish the equilibrium of certain very low exchanges by opening credits or by purchasing devices of the countries whose exchange has depreciated. * * * This is a very important project because of the liaison it would create between the question of the interallied debts and that of the exchange (it even makes use of the bonds issued under the ter Meulen plan—Art. I, Par. 26)."

I tell you this because you were good enough to publish

my article, though you had some grave mental reverberations concerning the advisability of putting so much power into the hands of any group of men, even though the interests of those men were as diverse as those required by the plan.

If so great a benefit to mankind as the Panama Canal could properly be constructed by the issuance of currency against the security of the United States Government as represented by the Panama Canal two per cent bonds, it seems even more proper that the United States, with the credit of the Allies as represented by the debts of the Allies, should enable the issuance of currency against those credits for the construction of adequate financial and commercial facilities to meet the present-day needs of the world, and that their utilization for this purpose should be carried out by and under the control of a properly organized instrumentality, such as the bank which the plan proposes.

HIRAM BARNEY.

\$1,000,000 Sugar Development in the Everglades.

Miami, Fla., October 21—More than 61,000,000 may be expended in the consummation of plans of the International Sugar Corporation in the development of a vast tract of land in the Everglades, and in the erection of a modern sugar-mill and refinery, according to Howard L. Allen, general manager of the corporation now in this city. The company's office is in the Desales Building, Washington.

Recently the corporation completed a deal for purchasing 4000 acres of land known as the Ross Clark property, near Fort Lauderdale. It is the purpose of the company to start planting operations this winter. Initially 200 acres are to be planted, and this will be used in connection with the development of the remainder of the tract, and possibly during the second year 2000 acres will be planted.

As contemplated the mill will have a capacity of 1500 tons of cane daily and will turn out sugar ready for the market at the rate of 200,000 pounds daily, according to Mr. Allen. The mill, refinery and equipment will cost about \$1,000,000 and the development work necessary on the land will cost \$100,000.

An additional tract of about 6000 acres of land will be developed into small farms of 10 acres each and up, this land being owned by Mr. Clark. Canals and roadways are planned, so that the territory will have good drainage facilities. The Everglades Land & Development Co. of Miami, will be in charge of the colonization of this area.

Efforts will be made immediately to create a special drainage district covering the section, so that work of this character will be facilitated.

Mechanical Engineers Meeting at Tulsa.

The mid-continent section of the American Society of Mechanical Engineers will hold its fall meeting at Tulsa, Okla., on October 28. Among the speakers will be: Benj. Greenfield of the Doherty Research Co., Bartlesville, Okla.; Chas. O'Connor, attorney, of Tulsa; and J. L. Harrington, of Kansas City, newly elected president of the American Society of Mechanical Engineers. W. L. Sullivan is chairman of the publicity committee.

Will Erect Lodge Building.

Okmulgee, Okla., October 21—Elks Lodge No. 1136 plans the erection of a three story and basement building, 70 by 137 feet to cost \$175,000. Smith & Senter have been selected as architects.

Amazing Congressional Cowardice in Endangering Our Chemical and Potash Industries, to Germany's Profit.

DR. CHAS. W. DABNEY OUTLINES SITUATION AND TELLS OF POTASH POTENTIALITIES IN TEXAS.

By CHARLES WM. DABNEY, PH.D., LL.D., Houston, Texas.

I have read with interest the article in the MANUFACTURERS RECORD of September 21 on "The Effect of the Congressional Refusal to Protect the American Potash and Chemical Industries," and wish to express my full concurrence in the statements therein and to emphasize a little the case for an American potash industry.

In view of the horrors caused by the use of chemicals in the Great War and of the predictions of military authorities with regard to the even more terrible methods certain to be used in future wars, the action of Congress in destroying our new chemical industry, which grew out of the necessity of overcoming these methods, must be incomprehensible to the outsider. The same is true of their treatment of the rising potash industry. Why have they been destroyed? The whole Congress cannot have sold out to Germany. Then why should a Congress controlled by a political party whose chief principle is the protection of all American industries, especially its "infant" industries, sacrifice, in the broadest tariff bill ever passed, two new industries which recent experience has shown were vital, not only to our material prosperity but to our national defence?

Germany showed us how all modern warfare is based upon the chemical industry. We saw how her dye factories, a large source of revenue during peace, were immediately converted into factories of explosives and other munitions. We heard, also, the boast of German scientists that the cutting off of the supply of potash from our farms, as well as from our powder factories, would soon bring us to their feet. After doing everything it could to develop these industries during the war, it appears astoundingly stupid for our Government to turn around and kill them in the first time of peace. To one on the outside, such action is incomprehensible.

One who has followed the business closely in this Congress knows, however, that this remarkable act, for which both Democrats and Republicans are responsible, was the result, not of deliberate thought and concerted purpose, but of narrow and ignorant partisanship, influenced by selfish motives of temporary expediency. Both the Republican and the Democratic members, thinking primarily of their own election only, were striving to win the votes and the financial support of two big, well-organized groups, the users of dyes and chemicals, backed up by the German producers and the so-called "Farm Bloc," which had been stirred up by the fertilizer manufacturers and the agents of the German Potash Syndicate. Both parties in Congress were terrorized at the end of the session by these people and each was struggling to win their support.

During the period of serious deliberation, in the earlier part of the session, the House of Representatives had approved a provision in the bill for the protection of both dyes and potash. When the Senate, yielding to clamor against the Chemical Foundation, which had secured the German dye patents for our country, cut out the protection on dyes and changed the temporary tariff on potash to a bounty, the House took fright, reversed itself on potash and yielded up its position on dyes—as pitiful a performance as was ever witnessed in that great hall of demagoguery.

As the writer of the article referred to discusses chiefly

the case for the chemical industry, I shall try here to explain the case for potash as presented to this Congress. It is well known that up to the time of the war, America had produced almost no potash but was almost totally dependent for this material for its chemical and fertilizer industries upon the Germans, who won larger returns, perhaps, from their potash and their dye exports than from any other export. Thus our American potash resources remained entirely undeveloped, in fact, almost unknown.

When the war cut off the German potash our Government commenced at once, through its Geological Survey and Department of Agriculture, to search for potash and to promote its production by our citizens. The readier resources of potash, in brines, in marls, in seaweed, in the vapors from cement plants and other furnaces, etc., were naturally developed first. Millions of dollars were invested by our citizens in works to win potash from these sources. Great mining and producing plants were also planned and some of them partly erected for getting the potash from minerals, like the allentite of Wyoming.

The beds of potash salts supposed to exist in the Northwestern corner of Texas and the southeast corner of New Mexico were only partially known at the beginning of the war, and the region underlaid by them was so extensive that further exploration was required to locate mines there. But the exploration of them was gradually being made, in cooperation with the oil drillers. The U. S. Geological Survey says that the evidence thus accumulated "strongly indicates that we have in West Texas workable beds of potash within 1200 feet of the surface," i. e., "within shafting depth, of workable thickness and of commercial quality. It is practically certain that in this region the United States possesses enormous reserves of potash."

When, as soon as tradeways were opened, the Germans commenced dumping their accumulated potash upon our markets at prices far below their pre-war figures, it became evident that these promising beginnings and these even more promising expectations of ours with reference to a permanent home potash production were destined to prompt, total and permanent destruction unless some protection was secured for them, at least until our most available potash resources were developed and able to stand foreign competition.

As a means of presenting this case to Congress an association was formed, a brief prepared and laid before Congress. We had a hearing before the Committee of the House, and in an interview which I had the honor of having with the chairman, I received assurances of his support, which persisted to the end of the contest. Being a citizen of Texas, deeply interested in the development of her resources, the case for that State was committed to me. I, therefore, sought and secured the honor of a hearing from Mr. Garner, of Texas, the Democratic leader in the House, a member of the Finance Committee and afterwards of the Conference Committee of the Senate and House. After talking over the matter with Mr. Garner, I had the hope that he would, at least, not oppose the proposed tariff designed in part to give Texans an opportunity to develop this desired new industry, so important for the whole country. This much is said by way of introduction to the following, which I

addressed to Mr. Garner when I learned of the peril the measure was in in the Conference Committee:

"New York, Sept. 1, 1922.

Hon. John N. Garner,
House of Representatives,
Washington, D. C.

Dear Mr. Garner:

"I hope you will recall what I said to you some time ago about the importance of a tariff on potash for the development of the potash beds in Texas. Since that time the reports made by the United States Geological Survey, cooperating with the Texas State Bureau of Economic Geology, have fully confirmed our belief that extensive beds of potash exist in the Panhandle region. These are the most important beds of pure potash salts known to exist in America and are similar to those in Germany. We have every reason to believe that these beds will be found to be even more extensive than those of Germany and France combined.

"So far we have not been able to accomplish much in developing these beds, owing to the fact that the Germans are dumping their potash upon us at prices at least 40 per cent less than they asked for it before the war. The fertilizer manufacturers on the Atlantic Coast had a contract with them recently for a year's supply at such a price as to utterly discourage capital from going into the development of our Texas beds.

"When European sources of potash were cut off during the war our Government encouraged its citizens to hunt up and to develop potash in the United States in every way possible. As a result some thirty companies were formed and over thirty millions of dollars invested in the effort to produce a home supply of potash. The industry was developing well when the war closed and the Germans commenced to dump their accumulated supplies upon us, with the result that only one of these companies is now operative, and it will probably have to close down soon. Unless we have protection our American potash industry cannot be developed. For these reasons we asked for and obtained from your Committee moderate protection for five years, which provision was approved by the House, but has now been cut out of the bill in the Senate by a majority of only two votes.

"I am writing to you, therefore, to ask that you will make a most earnest endeavor to have this tariff on potash restored to the bill in the Conference Committee.

"I would emphasize the importance of this for Texas. With this moderate protection for a few years, I believe we will develop a tremendous potash mining industry in the Panhandle region, to the great benefit of the State and the whole country. You know how greatly that region needs an industry of this kind. The public schools and the State University of Texas have extensive bodies of land in that region, which probably contain potash, and this development would help them very much besides providing great additional taxable values for our State in a vast country where there is very little now. These beds may underlie twenty large counties."

(Omitting two paragraphs in which I write of other natural resources—coal, iron, kaolin and asphalt rock—in Mr. Garner's own section of West Texas, which might be developed, I concluded:)

"Texas has a greater variety of mineral resources than Pennsylvania and Ohio both together. Until now they have been largely neglected. The time has come when we should develop our mines and build up our manufactures, as well as our agricultural industries, but we cannot do this unless we have some protection like that which the East had in the beginning. May I not hear from you?

"With kind regards, I am,

"Very truly yours,

"CHARLES WM. DABNEY."

I was not favored with even an acknowledgement of this letter. Without Mr. Garner's assistance the Conference Committee reported the bill with an embargo on dyes and a tariff of 30 cents a unit (20 pounds in the ton) on pure potash (K_2O)—50 cents was the original House tariff—decreasing each year until the third, after which it ceased. A few days thereafter Mr. Garner led the attack for his side on the Committee's report, which resulted in reversing the former action of the House and in killing both the dye and the potash proposals. So potash remains on the free list.

The speeches against the potash tariff contained only one serious argument. It was stated that this tariff would make their potash cost the farmers \$30 a ton more. Now farmers never use any pure potash salts, or any kind unmixed. The

ordinary fertilizer contains usually less than 3 per cent of potash; so that, if the manufacturers passed the tariff charge on to the farmer, it would amount to only 90 cents on the ton.

In this connection it will be interesting to learn whether the manufacturers of fertilizers, who have been getting their potash for about one-half of what they paid for it before the war, are giving our farmers any part of this reduction in the price of the fertilizers they buy. Of course, as soon as the possibility of a potash industry in our country is removed and the German monopoly of the world's markets is again secured, the price of potash will be put up again.

It is unnecessary to refer to the other arguments used by the gentlemen of both parties in explanation of their change of heart. A particularly absurd one was the story that a big company in the West had accumulated a great quantity of potash, which was being held to be sold, as soon as this tariff became effective, when a division of the proceeds would be made with the Republican Congressional Campaign Committee.

Each party feared the other might get all the farmers' votes, so there was a rush of men from both sides to avow their devotion to the backers of the "Farm Bloc" and their disapproval of the grasping and wicked men who were trying to develop a potash industry in America!

When shall we have representatives who will consider the interests of all the people above any temporary party advantage? And when will the South have representatives who will have the same regard for the development of the resources and industries of their section that the Eastern and Western representatives have always had for their people's interest?

U. S. Geological Survey Adds Further News as to Texas Potash—Analyses of Well Borings.

In conformity with the purpose of keeping the public fully informed regarding the progress of discoveries in the search for potash in western Texas the Director of the United States Geological Survey, Department of the Interior, has issued a statement of the results of the examination of samples of cuttings from two wells recently drilled there—the McDowell well No. 4, in Glasscock County, and the Texon Oil and Land Company's Santa Rita well, in Reagan County, as follows:

The samples represent cuttings reaching depths of 2550 and 4426 feet, respectively, in the two wells, but no samples representing a gap of 680 feet between 1010 and 1605 feet have been received from the McDowell well. There is also a gap of 2205 feet between the 1683 and 3888 foot levels in the Santa Rita well from which no samples have been received. The samples that contained as much as 1½ per cent of potash (K_2O) are listed in the following table:

"Samples of cuttings from wells in Glasscock and Reagan counties, Tex., containing 1½ per cent or more of K_2O .

McDowell Well No. 4, Glasscock Co.

Depth in Feet.	Soluble Salts.	K_2O In Sample.	K_2O In Soluble Salts.
1015-1020	65.70	2.45	2.88
1035-1050	75.40	7.50	9.95
1050-1060	61.30	1.81	2.93
1100-1110	87.50	1.74	1.99
1110-1125	81.40	1.68	2.06
1140-1150	80.80	3.00	3.71
1180-1195	97.40	2.04	2.10
1205-1220	97.80	1.59	1.63
1265-1275	91.10	2.64	2.90

Santa Rita Well, Reagan Co.

Depth in Feet.	Soluble Salts.	K_2O In Sample.	K_2O In Soluble Salts.
1150-1165	61.70	2.46	3.96
1175-1182	62.60	5.63	8.99
1255-1265	76.10	5.05	7.43
1265-1275	82.30	2.50	3.04
1275-1283	78.40	6.38	8.15
1283-1293	84.20	7.88	9.38
1293-1300	47.40	4.00	8.45
1310-1316	92.10	2.05	2.23
1316-1325	76.90	8.29	10.78
1402-1410	93.70	1.84	1.96
1545-1554	92.90	1.86	2.00
1623-1630	79.50	1.48	1.98

"Besides the 9 samples from the McDowell well containing

1.5 per cent of K_2O there were 6 samples containing more than 1 per cent but less than 1.5 per cent. Nine other samples contained between 0.5 per cent and 1 per cent.

"Among the samples from the Santa Rita well not listed above are 5 that contain between 1 and 1.5 per cent of K_2O . Eighteen other samples, distributed at intervals from the 1192 to the 1683 foot levels, contained between 1 and 1.5 per cent of K_2O .

"The samples thus analyzed, like those described in earlier announcements, were taken by standard tools from wells drilled primarily for oil. So many of the conditions attending the sampling are unknown that it is impossible to state whether the potash-bearing zones are a few feet or only a few inches thick. In the Santa Rita well, for example, the original sample taken from the bailer after the drill had cut the beds from 1316 to 1325 feet showed 8.29 per cent of potash, equivalent to 10.78 per cent of the soluble salts, yet it can not be safely inferred that there is a 9-foot bed of potash salts of the stated richness at that horizon. Continuous sampling with core drills will be necessary before accurate data can be obtained.

"Core drilling in the region is contemplated in the near future by several companies. The Farmers Oil Company, of Lancaster, Pa., is now making a core test near Odessa, in Ector County. At last reports the well was down 900 feet but not deep enough to encounter the salt zones. The samples obtained will be analyzed in the laboratory of the United States Geological Survey.

"In recent newspaper accounts the Geological Survey has been accused of maintaining an air of secrecy with regard to potash developments in Texas and of withholding information from the public. The Survey, however, is obligated to protect information that it receives confidentially. Further, although it is genuinely optimistic about the probable discovery in Texas of potash of commercial quality and quantity, it must exercise due caution lest its published statements be made the basis of unscrupulous stock promotion."

Promising Outlook for Development of New Oil Fields in Arkansas.

By TOM SHIRAS, Mountain Home, Ark.

With five wells, each producing from five hundred to five thousand barrels of oil a day, others on the sand, and still others nearing completion in the Camden-Smackover district, and six pumpers producing about 100 barrels a day each in the Stephens district, Ouachita county promises to be the next big oil producing county in Arkansas. Two of the six producing wells in the Stephens district are located close to the Ouachita county line in Columbia county. Ouachita county is located just north of Union county, in which the Eldorado field, the first field brought in, in the state is located.

The day this article is written, two wells in both districts are making production and there are also three big gassers. By the time it is published probably twice that many will be in. The production in the Stephens district is being shipped directly to the refineries. The production from the Camden-Smackover district is being held in temporary tankage awaiting the completion of a pipe line and loading racks. This oil will be run to Smackover. Work will be started soon on a permanent pipe line to the refineries at Eldorado. Smackover is located on the Missouri Pacific Railroad, 16 miles south of Camden. The oil wells lie from three to three and a half miles north, in Ouachita county. The gassers that have been brought in lie about the same distance south, just across the line in Union county.

The Stephens district is located in the southwest part of Ouachita county, about twenty miles southwest of Camden. This district first brought Arkansas into prominence as a possible oil producing state.

The formations in the Ouachita County Field have proven to be about the same as those encountered in the Eldorado Field in Union county. The pay sand is found at from 2000 to 2200 feet. While no information has been given out as to the thickness of this sand, gossip is to the effect that one well recently completed, went into it to a depth of thirty feet.

Unlike the oil in the Eldorado Field which has a high gasoline content, Ouachita county crude carries but little gas, but has a high lubricant value. Eldorado crude runs as high as 37.5 degrees Baume gravity; Camden-Smackover crude from 20 to 22, and Stephens crude around 27.

The Standard Oil Company is laying a pipe line to Smackover, where a loading rack is being constructed.

Owing to the loose character of the formation, rotary rigs are being used exclusively in the field, no standard tools having been brought in. The ground cuts easily and a well can be sunk to the producing sand in thirty days or less, at an approximate cost of from ten to twelve thousand dollars, which includes derrick and casing.

The Standard Oil Company, and the Simms Oil Company, the latter a big independent concern, are two of the largest companies in the field. Both hold large acreages. Near Smackover their lines touch, and they are engaged in drilling offsets, which promises a quick development for that section.

There is no excitement or inflation of prices in Camden. About the only evidence one sees of a new oil field, is a very noticeable increase in bank deposits; a thousand or so new citizens, increased activity in all lines of real estate, and a quickened stride in business.

Secretary Newton of the Chamber of Commerce, says: "We have an opportunity to make Ouachita county a great industrial county, and we are not going to throw it away. We are going to maintain conditions so inviting that men who have money to invest can come here and feel that they are getting value for what they spend, put their money into legitimate enterprises at legitimate prices."

Camden is one of the most beautiful little cities in Southern Arkansas. It is modern in every respect, light, water sewerage, paved streets, and has an increasing population of about six thousand. The town is located on Fabre's Bluffs, on the west bank of the Ouachita river, which heads deep back in the Arkansas Ozarks. The stream is navigable and a recent appropriation by congress, of eight hundred thousand dollars to complete a system of locks and dams on which work was started 25 years ago, will give it a six foot channel to the Gulf, via the Red and Mississippi rivers. The Missouri Pacific, St. Louis Southwestern, and Rock Island railroads run through the town. When the lock and dam system is completed it will give Camden highly favorable freight rates.

Ice Plant Improvements to Cost \$275,000.

Oklahoma City, Okla., October 21—[Special.]—Ophuls & Hill Inc., of New York, have been named as consulting engineers for the New State Ice Co. of this city. Improvements costing \$275,000 are to be made including the installation of an electrically driven 60-ton raw water ice making plant. The storage capacity provided will be 6000 tons, and elaborate improvements will be made to the present plant and existing facilities.

Contract Awarded for 1,000,000 Barrel Cement Mill at Birmingham.

Dwight P. Robinson & Co., Inc., of New York has been awarded contract for the construction of a cement mill at Birmingham, Ala., for the Lehigh Portland Cement Company of Allentown, Pa. The mill will have a capacity of 1,000,000 barrels a year.

South Expending Over \$50,000,000 This Year on Apartment House and Hotel Construction.

CONTRACTS ALREADY AWARDED SHOW HUGE SUMS GOING INTO THIS CLASS OF BUILDING—TYPICAL OF SOUTHERN ACTIVITY AND ENTERPRISE.

The South will spend this year \$50,000,000 or more in the erection of apartment houses and hotel buildings, according to reports to date and estimates for the remaining months of the year. During the first eight months of 1922 as reported weekly in the Construction Department of the MANUFACTURERS RECORD, contracts for 299 buildings, either apartment houses or hotels, have been awarded in the sixteen Southern states and the District of Columbia, to cost a total of more than \$38,700,000. To this sum should be added the total for improvements, and for building small apartments, many of these being erected with garages in connection. Assuming that the same degree of activity continues throughout the remaining four months of the year, \$60,000,000 would not be an excessive figure for the grand total.

The foregoing figures do not include the cost of equipment or furnishing; they do not take into consideration the many incidental expenses involved before the buildings are ready for use, but indicate simply the contract price for the actual construction work.

In addition to the 299 contracts awarded, representing an exact figures \$38,711,839, a large number of apartments and

The interior decorations are in keeping with the general architectural features of the building. In both hotels and apartments ice and refrigerating plants are now quite frequently regarded as essential. Automatic elevators are common in the apartment houses. The hotels are equipped with both freight and passenger elevators. In a number of the



NEW HAMILTON HOTEL, WASHINGTON, D. C.

Erected for Hamilton Hotel Corporation. J. H. De Sibour is the architect, and the R. P. Whitty Company, the contractor.

hotels have been completed since the first of the year. These were started in the summer and fall of 1921, and in some cases even earlier, but figures on these buildings are in no case included in the totals.

The majority of these new buildings follow a general type of construction. In the main they are of steel or reinforced concrete frame; brick, stone and stucco walls; with terra cotta, tile or limestone finish, and with concrete slab, slate, tile and metallic roofs. And, of course, they are as nearly fireproof as modern methods of construction can achieve.



\$1,000,000 APARTMENT HOUSE AT KANSAS CITY.

To be erected for H. J. Sophian. The architects are Shepard & Wise, Kansas City; the contractors are the Manhattan Construction Co., Muskogee, Okla.

larger and more elaborate structures plans have been made for complete radio service for the entertainment of guests.

The following table shows the number of hotel buildings and apartment houses erected in the South and their valuation for the first eight months of this year:

	Number of Buildings.	Valuation.
Alabama	7	\$273,000
Arkansas	6	124,000
Dist. of Columbia	12	4,565,789
Florida	28	4,718,500
Georgia	40	5,220,500
Kentucky	7	1,151,000
Louisiana	30	703,340
Maryland	18	3,128,000
Mississippi	25	492,000
Missouri	22	5,389,000
North Carolina	22	3,697,000
Oklahoma	15	1,635,000
South Carolina	10	2,579,000
Tennessee	14	1,282,000
Texas	32	1,794,000
Virginia	21	989,000
West Virginia	10	970,000
Totals	299	\$38,711,839

Missouri Program Nearly \$5,400,000.

Missouri leads the other Southern states in the value of hotels and apartment houses for which contracts have been awarded since January 1 with a total of \$5,389,000 for 22 structures.

In Kansas City, H. J. Sophian is building a 9 story brick and stone structure at a cost of \$1,000,000. It contains 46 apartments of from four to eight rooms each, the Manhattan Construction Company, Muskogee, Okla., are the contractors, Shepard & Wiser the architects. The Ralph Real Investment Company is erecting a \$250,000 apartment house for which Fred Zurn of Kansas City is contractor, and N. Peters.



GRANADA APARTMENT HOTEL, MIAMI, FLA.

Erected for N. L. Stevenson and Jos. L. Hickson, at a cost of \$550,000. The architects are Hampton & Reinert, and the contractor, P. J. Davis, both of Miami.

Shawnee, Kans. the architect. The Bellevue Hotel is to cost \$650,000. Another hotel of 11 stories is being erected by C. O. Jones, the architects being Brostrom & Drotts and the contractor Harry Heflin both of Kansas City.

St. Louis is to have an elaborate apartment hotel on Union Boulevard; it is being erected by the Gates Construction Co. and will cost \$1,500,000. Barnett, Haynes & Barnett are the architects for the structure, which will be ten stories high, of reinforced concrete, brick and steel, with terra cotta trim, to contain 153 suites of two, three and four rooms each. The Paul Jones Realty Company is interested in the erection of a \$650,000 apartment property after plans by Mauran, Russell & Crowell, architects, with Nixon and Keeley Construction Company as contractors. A large number of apartment houses costing from \$15,000 up are now building.

St. Joseph, Mo. has a \$100,000 hotel under construction by Lee C. Broome; the contractors are the E. H. Lawhon Construction Company and Walter C. Boschen is the architect.

Forty Structures in Georgia to Cost \$5,220,000.

Georgia ranks second in valuation with a total of \$5,200,000 for forty structures. These include the following buildings in Atlanta: Annex to Hotel Ansley to cost \$750,000 or more; G. Lloyd Preacher & Co., Augusta, architects, and H. J. Carr & Co., contractors; the Pershing Point Apartments to cost \$750,000; the Bon Air Apartments costing \$250,000, G. Lloyd Preacher & Co. architects, Gude & Co., contractors. And a large number of other apartment houses from \$20,000 up are under way. A tourist's hotel costing \$1,500,000 is contemplated for early construction.

A hotel costing \$800,000 is planned by the Bon Air Hotel Corporation at Augusta, Ga., to replace the structure destroyed by fire. Willis Irwin of Augusta, and McKim, Mead & White, New York, are the architects, the Foundation Com-

pany, New York, the general contractors. The Bon Air will contain 300 rooms and baths. The Hotel Richmond to contain 200 rooms and be eight stories in height, is now under construction by the Griffin Construction Co., after plans by G. Lloyd Preacher & Co., and will cost about \$600,000.

Other Georgia cities are active in this same direction, notably Savannah and Macon. H. J. Smith president of the Dalton Hotel Co. is planning a \$100,000 hotel in Macon with A. Ten Eyck Brown, Atlanta, Ga., as architect.

Florida Cities Make Up Total of \$4,718,500.

Florida's apartment and hotel building program is made up of twenty-eight structures for which contracts have been awarded aggregating \$4,718,500. The activity is pronounced in practically every section of the state, and a large number of buildings have been completed this year. One of the most impressive structures now under construction is the El Verano Hotel at West Palm Beach, estimated to cost \$500,000; G. Lloyd Preacher & Co., Atlanta, are the architects, and the Foundation Company, New York, the contractors. In West Palm Beach also an addition costing \$150,000 has been made to the Hotel Royal Palm by George A. Corson, Buffalo, N. Y., contractor, after plans by Malcolm H. White, Charleston, W. Va., and a new wing to the Lake Court Apartments has been finished at a cost of \$100,000.

In Orlando, two important hotels are fast nearing completion. The Angebult Hotel of 11 stories and containing 225 rooms and baths will be opened early in December; Murry S. King, local architect, prepared the plans, and C. E. Hillyer, Jacksonville, was general contractor. An addition costing \$100,000 to the San Juan Hotel will be finished before the close of the present tourist season. It is being erected by the Turner Construction Company of Atlanta, and New York. W. L. Stoddart, New York, was the architect for this addition which contains 165 rooms, and is eight stories high with

reinforced concrete frame and exterior tile walls, stuccoed.

At Miami, the Granada Apartments will cost about \$500,000; Hampton & Reinert are the architects, and P. J. Davis the contractor for the five story structure which will cover an area 100x180 feet, and be of reinforced concrete and steel. Henry LePointe is the architect, and C. R. Donathan the contractor for a \$180,000 hotel for R. E. Peterson and others of New York City. The Miamara Hotel, being erected by the Commercial Realty & Construction Company after plans by E. A. Nolan, will cost over \$100,000.

Work has been resumed on the Pheil Hotel started in 1920 in St. Petersburg, and it is expected this will be completed about the first of the year. Emerson M. Wood has the general contract for an addition to the Ponce de Leon Hotel at a cost of approximately \$100,000; George Feltham is the architect. J. M. Brown will erect a \$150,000 hotel and store building, 65x100 feet, seven stories high with basement; the architect is H. L. Wendell.

A large development involving the ultimate expenditure of several millions of dollars is planned by the Fountain of Youth Hotel Company, at North Beach, near St. Augustine; the big Case Marina Hotel of this project was completed early this spring.

At Eustis a \$400,000 hotel is planned by the Fountain Inn Company, and the contract has been awarded to C. M. Emerson & Co., Brooksville, Fla., after plans by D. J. Spence, of Montreal, Canada.

Tallahassee will shortly have a \$200,000 hotel under way by Palledast & Regar, with J. H. Orr as superintendent of construction. In like manner work is progressing on new hotels and apartments in Daytona, Jacksonville, Palm Beach, Miami Beach, Fort Pierce, Melbourne, Winter Haven, and other cities and towns throughout the state.

Elaborate Structures Planned for Washington.

In Washington, it is natural that the size and cost of apartment houses, as well as hotels should be considerably above the average. Emphasizing this is the fact that the total of \$4,565,799 for contracts awarded in that city since

Stanton, and the architect E. Harris Janes of New York. J. H. de Sibour is architect for a \$600,000 building to be erected by R. P. Whitty contractor. Davidson & Davidson will erect a \$300,000 building of six stories, 72x200 feet, and containing 48 apartments of three and four rooms each; Claughton West is the architect; M. A. Weller Construction Company is the general contractor.



\$400,000 APARTMENT FOR ATLANTA, GA.

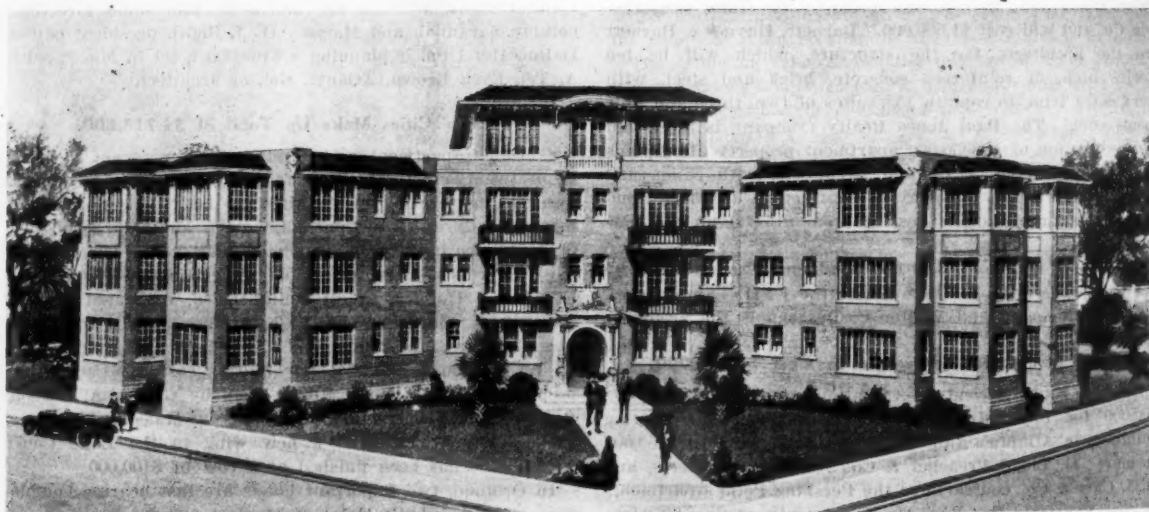
The Real Estate Investment Corporation, of Atlanta, is the owner. The architects are Hentz, Reid & Adler, and the contractors, Adair & Senter, both firms of Atlanta.

An eight story concrete and brick building costing \$200,000 will be erected by F. R. White and Charles Foley; F. H. Gore is contractor.

The Boyle, Robertson Construction Co. have the general contract for a \$280,000 apartment hotel for the Norman & Fowler Co. after plans by L. E. Sholtes, architect.

North Carolina's Total Nearly \$4,000,000.

North Carolina has under way a construction program totaling \$3,697,000 with special activity indicated at Charlotte



BERKELEY COURT APARTMENTS, CHARLESTON, S. C.

Erected for Edward J. Murphy at a cost of \$300,000. G. Lloyd Preacher & Co., of Atlanta, and Augusta, Ga., are the architect-engineers; Palmer-Splivy Co., of Charlotte, N. C., the contractors.

the first of the year is credited to only 12 structures, showing a very high average cost.

The Hotel President to be erected by the Hanford Hotel Company will cost \$1,500,000. The plans call for an eight story building of 300 rooms; the contractor is Charles E.

and at Raleigh where a ten story hotel costing \$750,000 is under construction. The architects are W. L. Stoddart, New York and James A. Salter, Raleigh. J. A. Jones Construction Co., Charlotte, are the contractors. At Charlotte the Citizen's Hotel Co. is building a fourteen story, 250 room structure to

cost also \$750,000; J. A. Jones Construction Co. are contractors; W. L. Stoddart, New York, architect.

The Selwyn Hotel is building an addition after plans by Louis H. Asbury, architect; J. A. Jones Construction Co. are the contractors.

At Albemarle the contract for a \$100,000 hotel has been awarded to the Goode Construction Co. of Charlotte after plans by Louis H. Asbury, Charlotte. At Salisbury, the Carolina Hotel Co. has awarded contract for a new building to A. R. Lazenby.



CITIZENS HOTEL, CHARLOTTE, N. C.

Cost over \$700,000. Architect, Wm. L. Stoddart, New York; Contractor, J. A. Jones Construction Co., Charlotte.

There is possibility of a \$1,000,000 hotel being erected in Asheville. G. Lloyd Preacher & Co., architects of Augusta, Ga. have already made preliminary plans for the interested parties and advise that, subject to temporary delay, the work will shortly go forward.

Rutherfordton will have a new hotel under the direction of S. B. Tanner, contractors being Oliver Hill and M. L. Justice. Thomas S. Robins of Asheville is erecting an apartment for which L. L. Merchant is contractor. At Blowing Rock an addition to the Maview Clubhouse will be made at a cost of \$250,000, J. B. Gardner of Charlotte being the general contractor.

Baltimore Figures Largely in Maryland Total.

Maryland shows a total of \$3,128,000 for the eight month period, 18 structures having been started. The major part of this work is under construction in the city of Baltimore. The Consolidated Engineering Company has the general contract for an apartment directed by John V. Brandau and others, which ultimately will cost \$1,250,000; J. E. Moxley, Jr. is the architect. Clyde N. Friz and others have awarded contract to the Price Construction Co. for apartment house construction to cost \$200,000. The Roland Park Company have let contract to Hicks, Tase & Norris for a \$140,000

apartment after plans by Parker, Thomas & Rice. H. Y. Brady is building a \$200,000 apartment, with J. R. Forsythe as architect. The Chadford Apartments are being built at a cost of \$225,000; Edward L. Palmer, Jr. is the architect with the Consolidated Engineering Company as general contractors.

At Frederick, Md. the Frederick Hotel Company is erecting a 160 room hotel to cost close to \$1,000,000. Harold Webber, Philadelphia is the architect and John H. Hershey, Philadelphia, the contractor.

Hotel at Charleston to Cost \$1,250,000.

The Francis Marion Hotel at Charleston is one of the outstanding hotel developments of South Carolina. It will contain 312 rooms with baths and cost over \$1,250,000. Wm. L. Stoddart of New York, is the architect; John W. Cowper Company, Buffalo, N. Y. has the general contract. Edward J. Murphy has awarded general contract for a \$300,000 apartment house to the Palmer-Spivey Construction Company, Charlotte; plans were prepared by G. Lloyd Preacher & Co., of Augusta.

The City Hotel Company of Greenville, has awarded to the Foundation Co., New York, the general contract for a seven story, 150 room structure; G. Lloyd Preacher & Co. are the



MAYO HOTEL, TULSA, OKLA.

Cost \$2,000,000. Twenty stories high. George Winkler, Tulsa, is the architect and the Mississippi Valley Steel & Bridge Co., of St. Louis, Mo., is the contractor for the steel frame.

architects. The Galivan Building Company are contractors for an addition to the Imperial Hotel to cost \$174,000. Aiken, Manning, Ware Shoals, Camden, Columbia, and Florence are among the other South Carolina cities taking a part in the work now going forward.

Texas Activity Well Scattered Throughout State.

The construction of more than thirty apartment and hotel buildings at a cost of \$1,794,700 is indicated in the survey

for Texas. The activity is widely scattered throughout the state, most of the structures costing from \$15,000 to \$150,000 each. Dallas, San Antonio, El Paso, Fort Worth, Houston, Austin, Corpus Christi, Waco, Palestine, Kennedy, Texaline, and many other cities and towns are represented in the total.

\$500,000 Apartment Under Construction at Louisville.

The expenditure of approximately \$1,151,000 for seven structures represents Kentucky's program. Joseph & Joseph, architects are erecting a \$500,000 apartment, seven stories with basement, 100x150 feet, at Louisville; C. L. Corner & Co. are the general contractors. The McAllister Hotel Company is building a \$150,000 addition; Frank B. Newell of Chicago is the architect; George W. Langford Co., Louisville are the contractors. A big hotel development is contemplated



ANGEBILT HOTEL, ORLANDO, FLA.

Cost \$1,000,000. Architect, Murry S. King, Orlando; Contractor, C. E. Hillyer, Jacksonville.

near Bowling Green by Malcolm H. Crump. At Middlesboro, a \$165,000 structure has been completed for the Cumberland Hotel Company; C. C. and E. A. Weber, of Cincinnati, were the architects, A. R. McMurphy of Knoxville, the contractor. At Harlan, the New Kelly Hotel has been erected after plans by Nelson Cory, architect, with J. E. Concha as contractor.

Activity in Virginia.

Virginia's program to which many cities and towns of the state are contributing will necessitate the expenditure of close to a million dollars. At Winchester, the George Washington Hotel Corporation is erecting a \$250,000 structure after plans by Clarence L. Harding, of Washington; the Wise Granite & Construction Company of Richmond are contractors. A number of large apartment houses are being erected in Norfolk and in Richmond.

Three Hotels Now Building at Bluefield, W. Va.

The construction of apartment houses and hotels in West Virginia shows a total almost identical with that of Virginia. Work has been resumed on the Hotel Bluefield in the city of the same name; it will be a twelve story structure, 60x175 feet, with 240 guest rooms; A. D. Mahood is the architect, and C. W. Hancock & Sons, of Lynchburg, are the general contractors. The Carter Hotel Company has awarded contract to Green & Stowe of Bluefield for a \$150,000 hotel after plans by Garry & Sheffy. Among other projects in the state are a \$70,000 hotel annex at Beckley, an \$80,000 hotel at Bluefield and a \$100,000 structure for the Shinnston Hotel Company at Shinnston. The R. R. Kitchen Company are contractors for the McLure Hotel at Wheeling to cost \$250,000.

Louisiana, Mississippi, Alabama and Arkansas.

Louisiana's present program totals something over \$700,000 which includes a \$250,000 hotel at New Orleans and a number of apartment houses costing from \$10,000 to \$100,000 each. Mississippi's 25 developments of this character reach a total of \$492,000. The figure for Alabama is \$273,000 and for Arkansas \$124,000.

Scarcely a day passes without the announcement of some modern and expensive hotel or apartment house to be built in the South. The outline we have given merely serves to show something of the progress that is being made in this line of construction work, indicative of increasing wealth and business.

Savings Deposits In National Banks Increasing.

Reports received by the Comptroller of the Currency from national banks concerning their savings deposits show that on June 30, 1922, there were 5782 national banks in this country carrying savings accounts or operating savings departments and that they had a total of \$3,046,054,000 of savings deposits to the credit of a total of 8,873,327 depositors, who received interest thereon at an average of 3-3/4 per cent. As compared with June 30, 1921, there were increases of \$88,499,000 in the total of savings deposits, 764,085 in the number of savings depositors and 162 in the number of national banks handling savings.

These evidences of thrift and prosperity are further strengthened by the fact that there was an increase in the total of time deposits in national banks during the two and a half years ended June 30, 1922, of \$972,409,000, making their total on that date, including postal savings deposits—\$4,111,951,000, the greatest amount of time deposits ever reported in these banks, and showing that the tendency to save is steadily increasing.

\$2,500,000 for School Buildings in Mississippi.

Jackson, Miss., Oct. 14—[Special.]—According to an announcement recently made by the Department of Education more than \$2,500,000 was expended for new school buildings in Mississippi during the fiscal year ended September 30, 1922, and contracts are now being fulfilled involving the expenditure of \$500,000 additional. The expansion program is featured by construction of agricultural and high schools.

For the upbuilding of the industry, sugar cane interests of Louisiana have combined with the organization of the American Sugar Cane League of the United States. Other cane producing states will be invited to join the League. Andrew H. Gay, president of the Louisiana Sugar Planters' Association has been elected president.

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Fifth Southern Textile Exposition Great Success.

MOST COMPREHENSIVE DISPLAY OF TEXTILE MACHINERY EVER ASSEMBLED IN THE SOUTH.

By HOWARD L. CLARK,

Greenville, S. C., Oct. 23.

One of the best textile expositions ever held in the South will close this week at Greenville. The Fifth Southern Textile Exposition is in every respect a most comprehensive exhibit of cotton manufacturing machinery and allied lines. It markedly portrayed the spirit of the awakened industrial South as exemplified by the Southern textile industry. Its educational value alone is immeasurable. Practically every machine and device entering into the operation of a spinning and weaving plant was shown and demonstrated by experts. For the moment agriculture was forgotten, though it is the foundation upon which the textile industry rests. Without the cotton farmer the intricate and varied cotton manufacturing machinery would be useless. But the South produces the cotton and it is now making its cotton into finished goods of every description. The South no longer is content to grow the raw material, or merely produce the coarser grades of cotton fabric as formerly; it is broadening the industry, covering all the ramifications of cotton manufacturing.

The Southern Textile Exposition is held every two years at Greenville, alternating with the Boston show. So great was the interest displayed that a special building became necessary. It is known as "Textile Hall," and was erected at Greenville and operated under the management of the Textile Hall Corporation. This permanent building, covering two floors and gallery, houses the exhibits of manufacturers from the East and South.

At the formal opening of the Exposition the address of welcome was made by Mayor H. C. Harvley of Greenville, and Governor Wilson G. Harvey in welcoming the visitors to the State spoke on the great responsibility resting upon the cotton manufacturing interests and business men generally of South Carolina in upholding law and order. Governor Harvey said that "if there ever was a time when business should take a new grip on itself and strive for bigger and better things it is the time of depression. Now is the time for the business men of America to get a new start, to go ahead and make conditions better." He pointed out that the cotton manufacturing industry of the South is the first to emerge from the business de-

pression that all but wrecked the country and that the cotton mills are beginning to hum. Some of them are working night and day, and the song of optimism is the refrain that is the dominant note of those in attendance.

One of the features of the Exposition this year is the holding by the South Carolina Cotton Manufacturers' and Southern Textile Associations of their fall convention during exposition week. This was an added incentive to executive heads, superintendents and others in managerial positions to visit the Exposition. At this point it may not be amiss to say that the whole-hearted co-operation and sincere hospitality of the people of South Carolina and Greenville contributed in no small measure to the feeling among visitors attending the Convention that they had been well repaid for their effort in going to the Fifth Textile Exposition.

All the latest devices and inventions for the manufacture of cotton were shown among the great variety of machinery and equipment. From the small working models, complete in detail, to the massive machines in operation, the show was intensely interesting, even to a layman. From the larger individual exhibits of cotton mill machinery, latest development of looms and spinning machinery, to the individual special apparatus and equipment for attachment to larger machines was obtained some idea of the wide ramifications of the textile industry. This great variety of machinery necessarily utilizes a wide range in the use of supplies and materials for the operation and maintenance of cotton-making machinery proper. There were exhibits of equipment and supplies, belting, transmission machinery, machine shop equipment and supplies, electrical equipment, dyestuffs, paints, oils and grease. In fact every line of industry was represented that is allied with the building and operation of textile mills. Exhibits included not only the machinery, equipment and supplies for textile production, but there were represented engineering and contracting concerns who design, supervise and build completed mills and villages.

Some idea of the scope of the Fifth Southern Textile Exposition is found in the accompanying list of exhibitors, many of whom had most elaborate and striking displays.

Aldrich Machine Works, Greenwood, S. C.
Alexander Brothers, Philadelphia, Pa.
(Greenville Office).

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
(Atlanta Office).

American Scrubbing Equipment Co., Hannibal, Mo.
American Steam Gauge & Valve Co., Boston, Mass.

American Tool Co., Cincinnati, Ohio.
American Vulcanized Fibre Co., Wilmington, Del.

American Wool & Cotton Reporter, Boston, Mass.

Armour Soap Works, Chicago, Ill.

Atlanta Brush Co., Atlanta, Ga.

Babian Textile Machinery Co., Union, S. C.

Babson, The Co., Winston-Salem, N. C.

Barber-Colman Co., Rockford, Ill. (Greenville Office).

Bird-Potts Co., Inc., Atlanta, Ga.

Blocker, Gregory Co., Inc., Boston, Mass.

(A. B. Carter Gastonia, N. C.)

Boller Equipment Service Co., Atlanta, Ga.

Borne-Schrymer Co., New York City.

Brown, Arthur S. Mfg. Co., Tilton, N. H.

(Charlotte Office).

Butterworth, H. W. & Sons Co., Philadelphia, Pa. (Greenville Office).

Carlyle Johnson Machine Co., Manchester, Conn.

Carolina Supply Co., Greenville, S. C.

Charlotte Leather Belting Co., Charlotte, N. C.

Chicago Bridge & Iron Works, Chicago, Ill.

(Atlanta Office).

Cleveland Thacker Loom Co., Greenville.

Cochrane Corporation, H. S. B. W., Philadelphia.

Cocker Mch. & Foundry Co., Gastonia, N. C.
Columbus Truck & Supply Mfg. Co., Columbus, Ga.

Corn Products Refining Co., New York City. (Southern Office, Greenville, S. C.)

Cotton, Atlanta, Ga.

Courtney, Dana S. Co., Chicopee, Mass.

(A. B. Carter, Gastonia, N. C.)

Cresson-Morris Co., Philadelphia, Pa.

Crompton & Knowles Loom Works, Worcester, Mass.

Crouse—Hinds Company, Syracuse, N. Y.

Curtis & Marble Mch. Co., Worcester, Mass.

Damascus Steel Products Corp., Rockford, Ill.

Danville Conditioning Co., Danville, Va.

Davis & Furber Machine Co., North Andover, Mass.

DeLoach Quick Ice Machine Co., Columbia, S. C.

Detroit Graphite Co., Detroit, Mich.

(Greenville Office.)

Detroit Steel Products Corp., Detroit, Mich.

Draper Corporation, Hopedale, Mass.

DuPont, E. I. de Nemours & Co., Wilmington, Del.

Eclipse Textile Devices, Inc., Elmira, N. Y.

Economy Baler Co., Ann Arbor, Mich.

Electric Rotary Mch. Co., Chicago.

Fafnir Bearing Co., New Britain, Conn.

Faneourt, W. F. & Co., Philadelphia, Pa.

(Greenville Office.)

Fisher Governor Co., Marshalltown, Iowa.

Ford, J. B. & Co., Wyandotte, Mich.

Foster Machine Co., Westfield, Mass.

Fresh Water Pump Co., Spartansburg, S. C. (Greenville Office.)

General Electric Co., Schenectady, N. Y. (Atlanta Office.)

Georgia School of Technology, Atlanta, Ga.
Georgia Webbing & Tape Co., Columbus, Ga.

Graton & Knight Mfg. Co., Worcester, Mass. (Atlanta Office.)

Greenville Textile Supply Co., Greenville, S. C.

Grisel Mfg. Co., New Haven, Conn.

Grinnell Co., The, Providence, R. I. (Atlanta Office.)

Haralson Sales Co., Birmingham, Ala.

Harris, A. W. Oil Co., Providence, R. I.

Helburn & Thompson Co., Salem, Mass.

Henrietta Mills, The, Caroleen, N. C.

Holbrook Raw Hide Co., Providence, R. I.

Holtzer Cabot Electric Co., Boston, Mass.

Hopedale Mfg. Co., Milford, Mass.

Howard Brothers Mfg. Co., Worcester, Mass.

Hulme, J. S., Atlanta, Ga.

Huntington & Guerry, Inc., Greenville, S. C.

Hyatt Roller Bearing Co., New York City. (Worcester, Mass.)

Jordon Mfg. Co., Monticello, Ga.

Judson Mills, Greenville, S. C.

Kardex Sales Co., Atlanta, Ga.

Kaumgraph Company, New York City. (Southern Office, Charlotte, N. C.)

Keever Starch Company, The, Greenville, S. C.

Keystone Lubricating Co., Philadelphia, Pa.

Lawrence, A. C. Leather Co., Boston, Mass.

Lazenby, F. A. & Co., Baltimore, Md.

Link-Belt Co., Nicetown, Philadelphia, Pa.

Livermore, H. F. Co., Boston, Mass.

(Greensboro, N. C.)

Lockwood, Greene & Co., Atlanta, Ga.

Lord & Burnham Co., Irvington, N. Y. (Atlanta Office.)

Lunkenheimer Co., Cincinnati, Ohio.
 L. V. B. Tension Co., New Bedford, Mass.
 (A. B. Carter, Gastonia, N. C.)
 McClave-Brooks Co., Scranton, Pa. (Green-
 ville Office.)
 McLeod Leather Belting Co., Greenville.
 Manhattan Rubber Co., Passaic, N. J.
 Manufacturers Record, Baltimore, Md.
 Mason Machine Works Co., Taunton, Mass.
 (Greenville Office.)
 Mathieson Alkali Works, Inc., 25 W. 43rd
 St., New York City.
 Minter Homes Co., Greenville, S. C.
 Moccasin Bushing Co., Chattanooga, Tenn.
 Moloney Belting Co., Chicago, Ill. (J. C.
 Duckworth, Greenville, S. C.)
 Monroe Calculating Machine Co., New York
 City.
 Morse Chain Co., Ithaca, N. Y. (Charlotte,
 N. C.)
 Mossberg Pressed Steel Corp., Attleboro,
 Mass.
 National Aniline & Chemical Co., Inc., New
 York City.
 National Lamp Works, Nela Park, Clevel-
 and, Ohio.
 N. Y. & N. J. Lubricant Co., New York
 City.
 Norris Brothers, Greenville, S. C.
 North Carolina Reed Co., High Point, N. C.
 Oakley Chemical Co., New York City.
 Odell Mill Supply Co., Greenville.
 Olson, Samuel & Co., Chicago, Ill.
 Orr, Henry H., Greenville, S. C.
 Park Mfg. Co., Charlotte, N. C.
 Parks-Cramer Co., Charlotte, N. C.
 Peerless Folding Ladder Co., Greenville,
 S. C.

Piedmont & Northern Railway, Greenville,
 S. C.
 Piper, J. A. Roofing Co., Greenville, S. C.
 Pittsburgh Plate Glass Co., Pittsburgh, Pa.,
 (Atlanta Office.)
 Reeves Pulley Co., Columbus, Ind.
 Rex Engineering Co., Dunkirk, N. Y. (At-
 lanta Office.)
 Rhode Island Warp Stop Equipment Co.,
 Charlotte, N. C.
 Rogers Fibre Co., Philadelphia, Pa.
 Root The Co., Bristol, Conn.
 Roy Specialty Co., Greenville.
 Ruggles-Klingemann Mfg. Co., Salem,
 Salem, Mass.
 Sellers, William & Co., Philadelphia, Pa.
 (Greenville Office.)
 Seydel Chemical Co., New York City.
 Shambow Shuttle Co., Woonsocket, R. I.
 (Greenville Office.)
 Shawmut Engineering Co., Boston, Mass.
 Sherwin-Williams Co., Cleveland, Ohio.
 (Greenville Office.)
 Sirrine, J. E. & Co., Greenville, S. C.
 S. K. F. Industries, New York City.
 Slaughter, G. G. Mch. Co., Greenville,
 S. C.
 Southern Franklin Process Co., Greenville,
 S. C.
 Southern Textile Bulletin, Charlotte, N. C.
 Speed, James & Co., Boston, Mass.
 Stafford Co., The, Readville, Mass.
 Standard Fibre Co., Somerville, Mass.
 Standard Oil Co., Charlotte, N. C.
 Steel Heddle Mfg. Co., Philadelphia, Pa.
 (Greenville Office.)
 Stein, Hall & Co., New York City.

Superheater Co., The, New York City.
 Sweeney, R. P., Union, S. C.
 Talcott, W. O. & M. W., Inc., Providence,
 R. I.
 Terrell Machine Co., Charlotte, N. C.
 Texas Co., The, Atlanta, Ga. (Greenville
 Office.)
 Textile Home, The, Charlotte, N. C.
 Textile World, New York City. (Green-
 ville Office.)
 Textiles, New York City.
 Tull, J. M. Rubber & Supply Co., Atlanta,
 Ga.
 Transmission Ball Bearing Co.
 U. S. Bobbin & Shuttle Co., Providence,
 R. I.
 U. S. Gutta Percha Paint Co., Providence,
 R. I.
 Universal Winding Company, Boston, Mass.
 (Charlotte Office.)
 Veeder Mfg. Co., Hartford, Conn.
 Wadsworth Howland & Co., Boston, Mass.
 (Greenville Office.)
 Walraven Co., The, Atlanta, Ga.
 Ware Shoals Mfg. Co., Ware Shoals, S. C.
 Westinghouse Electric & Mfg. Co., At-
 lanta, Ga.
 Westinghouse Lamp Co., Atlanta, Ga.
 Whitin Machine Works, Whitinsville, Mass.
 (Charlotte Office.)
 Whitinsville Spinning Ring Co., Whitins-
 ville, Mass.
 Wolstenholme, Thos. Sons & Co., Inc.,
 Philadelphia, Pa.
 Woods, T. B. Sons Co., Chambersburg, Pa.
 (Greenville Office.)

Activity in Cotton Spinning Industry.

Washington, October 20—[Special.]—The Department of Commerce announces that, according to preliminary figures compiled by the Bureau of the Census, there were 37,075,407 cotton spinning spindles in place in the United States on September 30, 1922, of which 33,296,513 were operated at some time during the month, compared with 32,499,324 for August, 31,975,269 for July, 31,877,015 for June, 31,653,061 for May, 31,389,266 for April, 31,874,496 for March, 33,797,380 for February, 34,457,509 for January, and 33,874,620 for September, 1921.

The aggregate number of active spindle hours reported for the month was 7,760,863,470. Based on an activity of 25½ days, (allowance being made for the observance of Labor Day in some localities) for 8.74 hours per day, the average number of spindles operated during September was 34,822,378, or at 93.9 per cent capacity on a single shift basis. This number compared with an average of 34,041,029 for August, 32,242,369 for July, 32,803,293 for June, 32,502,674 for May, 30,921,094 for April, 33,117,840 for March, 34,577,837 for February, 35,751,715 for January, 34,154,410 for December, and 36,074,401 for November. The average number of active spindle hours per spindle in place for the month was 209.

The total number of cotton spinning spindles in place, the number active, the number of active spindle hours, and the average spindle hours per spindle in place by states, are shown in the following statement:

	Spinning Spindles.		Active Spindle Hours For Sept.	Average per Spindle In Place.
	In Place Sept. 30.	Active During Sept.		
United States.....	37,075,407	33,296,513	7,760,863,470	209
Cotton-growing States.	16,094,073	15,724,568	4,338,056,582	270
All other States.....	20,981,334	17,571,945	3,422,806,888	163
Alabama.....	1,300,031	1,227,713	333,072,512	256
Connecticut.....	1,377,084	1,301,306	275,943,565	200
Georgia.....	2,687,078	2,609,747	716,230,316	267
Maine.....	1,146,440	1,114,566	206,997,188	181
Massachusetts.....	12,003,824	10,534,662	1,952,731,052	163
New Hampshire.....	1,448,660	1,417,656	87,401,552	60
New Jersey.....	445,203	431,344	77,432,691	174
New York.....	1,020,410	879,314	226,344,551	222
North Carolina.....	5,300,050	5,193,794	1,462,406,290	276
Pennsylvania.....	233,063	143,487	27,844,445	119
Rhode Island.....	2,837,066	2,333,058	482,524,928	210
South Carolina.....	5,099,616	5,025,471	1,411,654,232	277
Tennessee.....	426,710	424,080	107,760,513	253
Virginia.....	627,986	609,437	145,290,306	231
All other States.....	1,122,186	1,040,878	247,229,329	220

The First Baptist Church, of Beaumont, Tex., plans the erection of a \$150,000 structure, 117 by 140 feet. Barglebaugh and Barnes are the architects.

Contracts Let on Open Shop Basis for \$2,500,000 Home of Chamber of Commerce of United States.

Washington, October 23—[Special.]—Contracts have been let and work will start immediately on the \$2,500,000 home of the Chamber of Commerce of the United States, according to an announcement last week by Julius H. Barnes, president of the chamber. It was emphasized that the work would be done on a strictly open shop basis.

The successful bidders were: James Stewart & Co., Inc., New York, general contract; W. G. Cornell Co., Washington, heating, ventilating, plumbing and gas fitting; L. K. Comstock & Co., Inc., New York, electrical work; Otis Elevator Co., New York, elevators; American Bridge Co., New York, steel.

The building will be of classic architecture, with a frontage of 158 feet and a depth of 149 feet. Cass Gilbert, of New York, is the architect.

Contract Awarded for Second Unit of Office Building.

The W. P. Richardson Company, of Jacksonville, Fla., has been awarded the contract for erection of the second unit of the general office building of the Florida East Coast Railway, at St. Augustine. The first unit will be ready for use next month. Plans for the building were prepared by A. A. Hollingsworth of the railroad company's engineering force.

\$300,000 Library Planned for Charleston, W. Va.

Residents of Charleston, W. Va., are pushing plans for the erection of a \$300,000 library following an offer of Col. A. E. Humphreys to give \$100,000 for such a purpose if the city raised a similar amount. At a meeting held last week it was decided to raise \$200,000.

Bids Soon for \$800,000 Lodge Building.

Louisville, Ky., October 21—Joseph & Joseph are architects for the new building to be erected by Lodge No. 8, B. P. O. Elks at a cost of \$800,000, bids for which will be opened about November 1. The structure will be 140 by 180 feet, 8 stories high with basement.

Plans Completed for New Chamberlain Hotel.

Plans and specifications have been completed for erection of the New Chamberlain Hotel to be built at Old Point Comfort, Va., at a cost of \$1,500,000. Harry Wardman, of Washington, is directing the rebuilding plans. The new hotel, as designed will have 300 rooms, each with private bath.

Clay Industry of South Fostered by Broad-Visioned Railroad Management.

FIRST LARGE SCALE TEST OF KAOLINS, WHITE CLAYS AND REFRACTORY CLAYS NOW UNDER WAY BY GOVERNMENT, ON INITIATIVE OF CENTRAL OF GEORGIA RAILWAY, WHICH BEARS HALF EXPENSE OF INVESTIGATION.

By ALBERT PHENIS.

While knowledge that Southern clays were suitable for pottery making has come down from Colonial days, no such systematic effort at their extensive utilization has been made as is now being undertaken. It is an interesting fact that so long ago as 1765 Sir Josiah Wedgwood, the renowned manufacturer of Wedgwood ware, wrote to an English conferee of his, regarding the possibilities of pottery manufacture in the Southern part of the American colonies, as follows: "They have got every material there equal if not superior to our own."

Sir Josiah expected pottery works to be established in the Southern states on a scale to cut into his valuable exportations to the colonies. How much longer will this 150 year old prophecy remain unfulfilled?

Having recently accompanied Mr. J. D. McCartney, Assistant to the President, and Mr. J. M. Mallory, General Industrial Agent of the Central of Georgia Railway, on a trip to the Ceramic department of the U. S. Bureau of Mines at Columbus, O. and to various leading potteries, clay factories, etc. in cities in Ohio, West Virginia, and in Pittsburgh, where actual commercial tests of Georgia clays have been, are now, or will soon be made, I have gained a comprehensive insight into what the railroad management has in mind in conducting these tests on a scale never heretofore attempted. In its aims and in its methods, it seems to me that what the Central of Georgia Railway is undertaking in the way of developing the resources in its territory furnishes an example that may well be emulated by other railroads in the South. Exact knowledge as to what the resources are—location, quantity and commercial uses to which they may be put—is the first essential in interesting investors. Therefore, when the Central of Georgia turned its attention to the vast deposits of clays along its line in Georgia and Alabama, it first determined through surveys by the state geologist and their own geologist, Dr. T. Poole Maynard, the practically inexhaustible quantity of the deposits. Then it began a thorough investigation as to what uses could be made of these clays. It is now in the way of obtaining all the information required by any user of clay, for tile, pottery, fire brick, etc., and results so far are of a highly promising and important character.

While the production of clay is not a new and untried industry in Georgia, for at the present time more than 60 per cent of the clay used for filler purposes, such as paper, rubber, oil cloth, etc., is produced in Georgia, there has been little or no effort made heretofore to introduce it into the ceramic industry; to standardize the product and to establish uniformity in quality, without which no clays are available for the making of tile, pottery, etc. The first step of the Central of Georgia Railway has been to demonstrate that the Georgia clays are entirely suitable for all except the finest grades of chinaware. The next step will be to bring about a greater development of the clay industry of the South. It will necessarily require sustained effort and considerable time, but the ultimate results should be the establishment of an important pottery industry in the South, in addition to an increased demand for Southern clays, to supplement if not replace the English clays now so extensively used throughout the United States.

This effort the Central of Georgia is making is inspired by a desire to be helpful to the producers in its territory. In

a highly public spirited manner, the Central of Georgia recognizes an obligation to its territory above and beyond that of furnishing adequate and reliable transportation. It considers itself a citizen of each community in which it operates, and leaves nothing undone that would contribute to the advancement and prosperity of the states it traverses. With this idea in view, and with no more selfish motive than to be a participant in the general prosperity industrial development brings, it has set about to do what it can for the advancement of the clay industry of Georgia, believing that in so doing it is performing a service not only to the immediate community affected but to the entire industry, inasmuch as the resources in other portions of the country are being depleted.

In furtherance of its plans, the United States Bureau of Mines was asked to co-operate. An agreement was reached by which the railroad company would pay half of the expense. Accordingly a trip was made over the Central of Georgia road to inspect the clay deposits. Subsequently a meeting was held at Birmingham to map out a plan of procedure.

As only small scale tests of the Georgia clays had as yet been undertaken, it was determined to make a large scale test of clays for pottery making and refractory uses. Accordingly 25 samples of two tons each of kaolin, bauxite, bauxitic clay and refractory clays were collected from a territory covering 250 miles, and were sent to Columbus, O., where the Ceramic station of the U. S. Bureau of Mines is located. Under the direction of Mr. G. A. Bole, Acting Superintendent of the U. S. Bureau of Mines at Columbus, and Dr. R. T. Stull, Supervising Ceramist, Bureau of Mines, a small sized commercial plant was constructed, and advanced methods of refining and treatment were employed. In the washing process, to make the product more uniform for pottery and filler purposes, a whirlpool separator was devised, which eliminates the grit, mica and other impurities. A special furnace was also installed, and every kind of a test was given the clays.

The work on the kaolins and white clays, and that on the refractory clays, are of course entirely separate and distinct. In the kaolins the work is directed toward better refining and the use of this material in tile and pottery. In the case of the refractory clays it is to demonstrate their possibilities for refractory products, such as high-grade fire brick and furnace lining. For the pottery clays, firing, glazing and decorating tests were made, and there were fusion tests and refractory tests on all the clays, at various degrees of heat, running up to 3700 degrees Fahrenheit. The tests were in general highly satisfactory, and in the case of fire brick, in the load and spalling tests they showed up better than those of the two best fire clays in use. In the spalling tests some of the five samples showed less than 1 per cent and two practically zero. The railroad company is getting out a carload of fire brick clay for testing as lining for oil and electric furnaces.

For pottery purposes, three representative lots of clay have been selected and sent, one, to the American Encaustic Tile Co. at Zanesville, O., manufacturers of wall tile, bathroom fixtures, etc.; another to R. Thomas & Sons, East Liverpool, O., manufacturers of electric high tension insulators, etc.,

and a third to Homer Laughlin Co., Newell, W. Va., chinaware of all description. In these various factories both the wet and dry processes are employed. If the Georgia clays come through these tests as it is expected that they will, it will be shown that they are adapted to practically every process and purpose.

Potters and manufacturers express themselves as favorable to the use of Georgia clays, in case uniformity of grade can

be secured. Their excellent qualities are recognized, and in many respects they are preferred to English clays; but the English clays are rigidly graded, so that no variation occurs from order to order, year in and year out.

With the information now being developed by the Central of Georgia Railway, intelligent steps can be taken to develop the clay industry of the South on a really adequate and creditable basis.

Southern Contracts Awarded Total Over \$409,000,000 for First Nine Months of 1922.

Building and other construction projects in the sixteen Southern states on which contracts were awarded in the first nine months of 1922, from January to September inclusive, had a total valuation of \$409,997,000, according to figures compiled from reports published in the DAILY BULLETIN and in the construction department of the MANUFACTURERS RECORD. The total of \$330,000,000 for the whole on 1921 is nearly \$80,000,000 below the present record with a fourth of the year yet to go.

Contracts to be let covering definitely planned construction work total \$808,280,000, as compared with \$715,155,000 for the corresponding period last year. The total of \$74,000,000 representing contracts to be awarded for projects initially announced during September and \$120,500,000 for similar

notices published in August affords an idea of the big volume of work in prospect.

Road, paving and bridge contracts totaling \$111,372,000 have been awarded in nine months this year, and in the amount of money involved this activity ranks first. To October, contracts for miscellaneous enterprises were let at a cost of \$107,705,000, placing this classification second in the amount of money involved. Included are garages, warehouses, railroad shops, hospitals, hydro-electric plants, grain elevators, piers, water and rail terminal facilities, theatres, and all work not covered specifically in any other classification. The construction of school buildings stands next in order with more than \$46,650,000 in actual awards in nine months.

RECAPITULATION BY WEEKS OF CONTRACTS AWARDED AND TO BE AWARDED.

Contracts Awarded.					
	Sept. 7.	Sept. 14.	Sept. 21.	Sept. 28.	Total.
Apartment Houses and Hotels.....	\$509,000	\$311,000	\$280,000	\$682,740	\$1,782,740
Association and Fraternal.....	135,000	70,000	600,000	805,000
Bank and Office Buildings.....	3,915,000	40,000	370,800	54,000	4,379,800
Church Buildings.....	266,300	277,000	235,000	407,500	1,185,800
City and County Projects.....	101,500	73,500	256,114	10,000	441,114
Dwellings.....	494,500	218,400	266,500	267,400	1,246,800
Miscellaneous Enterprises.....	6,236,750	3,283,000	2,342,702	1,198,376	13,060,828
Roads, Paving and Bridges.....	1,034,000	7,056,620	3,100,435	2,655,200	13,846,255
School Buildings.....	700,200	1,000,951	758,026	1,260,707	3,719,884
Sewers, Drainage and Water Works.....	281,500	465,000	990,011	220,232	1,956,743
Store Buildings.....	164,000	153,951	87,900	146,000	551,851
Total.....	\$13,837,750	\$12,949,452	\$9,287,488	\$6,902,155	\$42,976,845
Contracts to Be Awarded.					
	Sept. 7.	Sept. 14.	Sept. 21.	Sept. 28.	Total.
Apartment Houses and Hotels.....	\$3,634,000	\$299,000	\$1,223,000	\$2,473,000	\$7,629,000
Association and Fraternal.....	320,000	140,000	315,000	142,190	917,190
Bank and Office Buildings.....	175,000	2,240,000	2,352,000	1,080,000	5,847,000
Church Buildings.....	767,500	960,000	594,000	1,375,000	3,696,500
City and County Projects.....	108,000	65,000	155,000	173,000	501,000
Dwellings.....	434,500	1,745,900	233,000	1,004,300	3,417,700
Miscellaneous Enterprises.....	3,895,000	5,000,000	14,991,000	7,246,150	\$1,152,150
Roads, Paving and Bridges.....	1,150,000	2,215,500	2,031,129	2,852,988	8,249,617
School Buildings.....	1,126,500	1,510,000	735,000	637,000	4,008,500
Sewers, Drainage and Water Works.....	1,352,500	765,000	411,000	5,416,000	7,944,500
Store Buildings.....	165,000	233,650	52,000	236,200	686,850
Total.....	\$13,128,000	\$15,174,050	\$23,092,129	\$22,635,828	\$74,030,007

COMPARATIVE RECORD OF CONSTRUCTION SOUTH.

Contracts Awarded.			Contracts to Be Awarded.		
	1921.	1922.		1921.	1922.
September.....	\$36,468,872	\$42,976,845	September.....	\$65,828,240	\$74,030,007
August.....	22,531,274	56,828,000	August.....	72,833,895	120,554,200
July.....	31,935,131	52,054,400	July.....	105,744,097	77,166,350
June.....	24,841,640	49,340,627	June.....	108,971,224	86,174,830
May.....	22,630,100	58,338,434	May.....	84,752,130	81,176,960
April.....	33,889,346	62,992,960	April.....	136,979,131	89,697,394
March.....	25,361,377	40,548,231	March.....	87,916,333	123,488,397
February.....	14,350,944	35,774,174	February.....	30,920,254	61,379,657
January.....	8,107,757	21,143,479	January.....	21,209,800	64,720,995
Total for 9 months.....	\$220,116,641	\$409,997,150	Total for 9 months.....	\$715,155,104	\$808,388,790
Total—12 months, 1921.....	\$330,280,129		Total for 12 months, 1921..	956,928,881	

SUMMARY BY CLASSIFICATION.

Contracts Awarded—1922.			Contracts to Be Awarded—1922.		
	September	January to September Inclusive.		September.	January to September Inclusive.
Apartment Houses and Hotels...	\$1,782,740	\$40,494,579	Apartment Houses and Hotels...	\$7,629,000	\$71,505,250
Association and Fraternal.....	805,000	6,415,100	Association and Fraternal.....	917,190	22,601,734
Bank and Office Buildings.....	4,379,800	27,975,123	Bank and Office Buildings.....	5,847,000	38,394,250
Church Buildings.....	1,185,800	13,903,440	Church Buildings.....	3,696,500	35,730,700
City and County Projects.....	441,114	7,241,002	City and County Projects.....	501,000	20,010,500
Dwellings.....	1,246,800	14,747,722	Dwellings.....	3,417,700	38,309,780
Miscellaneous Enterprises.....	13,060,828	107,705,030	Miscellaneous Enterprises.....	31,132,150	244,053,077
Roads, Paving and Bridges.....	13,846,255	111,372,522	Roads, Paving and Bridges.....	8,249,617	161,219,063
School Buildings.....	3,719,884	46,650,471	School Buildings.....	4,008,500	95,577,650
Sewers, Drainage & Water Works	1,956,743	22,495,925	Sewers, Drainage & Water Works	7,944,500	63,636,350
Store Buildings.....	551,851	10,996,236	Store Buildings.....	686,850	19,350,400
Totals.....	\$42,976,845	\$409,997,150	Totals.....	\$74,030,007	\$808,388,790

Cooperative Marketing of Cotton.

A FAR REACHING CAMPAIGN OF COTTON GROWERS TO CONTROL THE MARKETING OF THEIR COTTON.

Some years ago the potato growers of the eastern shore of Virginia got steadily poorer year after year, notwithstanding they were helping to feed the country with millions of barrels of potatoes. Finding that it was in vain to struggle with increasing indebtedness under the marketing conditions prevailing they formed an organization, which was one of the first of the cooperative farm plans in the country, for the marketing of their potatoes.

The result has been a wonderful change in the financial condition of that section. Practically all of the potatoes grown on the Eastern shore of Virginia, amounting to some millions of barrels annually, are marketed through the Potato Exchange, and the result has been that poverty has given place to abounding prosperity.

Similar cooperative movements have taken place in other lines of farm work, and now the cotton growers of the South, through their cooperative associations, are beginning to learn something of the strength which they have through co-operation. In former years, by virtue of financial conditions, nearly every cotton grower rushed his cotton to the market as rapidly as it could be picked and ginned, every man seeming to fear to hold on to a single bale, when in reality the selling of cotton in this way was by reason of forced financial circumstances.

The cotton growers are now coming to realize that by co-operation they can market their cotton through twelve months of the year rather than in the two or three months in the fall, as formerly. This co-operative cotton marketing has been making great progress, as shown by letters and telegrams from the cotton co-operative associations in various states of the South whose special letters and telegrams to the MANUFACTURERS RECORD give an account of what has been done up to the present time in this movement.

One of the most striking facts brought out in all of the reports of these cotton associations is the hearty co-operation by Southern banks in financing their cotton, and that while the War Finance Corporation has put at their disposal many millions of dollars if needed, none of them has had to call upon the credit thus granted them, as the banks in each state have thus far been able to finance all the needs of these associations.

Strong Support of Co-operative Association by Georgia Cotton Growers, With Ample Financing Offered for All Needs.

Georgia Cotton Growers' Co-operative Association,
Atlanta, Ga., Oct. 17.

Editor Manufacturers Record:

The Association in Georgia now has 14,600 members, with a sign-up of 280,000 bales based upon the 1920 production. Since we commenced to receive cotton in August, the daily receipts have been steadily increasing and at the present, we are receiving an average of more than 1000 bales per day. We have received as high as 2100 bales in one day and as much as \$111,820.35 has been advanced to our members on one day's receipts.

At present, we estimate that we will receive from 75,000 to 80,000 bales of cotton this season, deliveries to date being 40,000 bales. Of course, the Georgia crop is very short and more than one-third of our members live in the worst infested boll weevil territory this year in our State.

In counties where our members are making a fair crop, we have already received from 65 to 75 per cent of the cotton they signed up for on the 1920 basis, and we have not received

all of the cotton, from these or any other counties, that we will get. To date, we have received most of our cotton from South Georgia, which has only one-third of our members, and it is estimated that we will receive from 10,000 to 15,000 bales more of cotton from this section. Middle and North Georgia, where two-thirds of our members live, have just commenced to deliver cotton.

The Association in Georgia is gratified with the loyalty of its members and their determination to sell their cotton co-operatively by and for themselves. Each day sees the addition of many new members to the Association and great numbers of the State's largest and most progressive farmers continue to sign our membership contract after they have had an opportunity to get a fair conception of how the Association will handle its business affairs and sell its members' cotton.

The War Finance Corporation is co-operating with us and has approved our application for a loan of \$5,000,000. The same can be said of the Atlanta banks that have already made loans to our Association in the sum of more than \$1,500,000. Also, we are getting offers of loans from country banks and even out of the state banks. The bankers of Georgia are giving us fine support and co-operation in handling the drafts of our members and generally in disseminating information, an essential work for conducting and facilitating the business affairs of our organization.

J. E. CONWELL, President.

War Finance Corporation's Money Not Used by Texas Associations, Though Available if Needed.

Texas Farm Bureau Cotton Association,
[Telegram to Manufacturers Record.]

Dallas, Texas, Oct. 18.

Contracts in our office cover half million bales of Texas cotton. We have received to date fifty-five thousand, two hundred and twenty-eight bales this year's cotton. Impossible at this time to predict total amount of cotton to be handled during season on account of local mortgages, short crops, members leaving farms, etc. The War Finance Corporation has placed at our disposal \$9,000,000, not a penny of which has been used, and it is unlikely that we will use any War Finance money. Our line of credit with fourteen Texas banks is \$3,700,000. With banks outside of Texas our line of credit is \$3,000,000. We can get more money from banks in and outside Texas, if we need it.

JOHN T. ORR, President.

Mississippi Aided in Part by Local Banks and Largely by the War Finance Corporation.

Staple Cotton Co-Operative Association,

Greenwood, Miss., October 17.

Editor Manufacturers Record:

The Staple Cotton Co-Operative Association handled over 158,000 bales last season. The average five year production of the members who have signed our contract at this time is nearly 300,000 bales. Of course, the actual amount of cotton which the Association will handle is dependent upon the size of the crop in any given year. We now hope to handle 200,000 bales during the present season.

The local banks of the Delta, with very few exceptions, are thoroughly co-operating with the Association.

As to commercial banks, we have had several offers to assist the Association in its financing of members and have arranged for a loan of \$3,000,000 from a syndicate of Southern

bankers. The Association has also secured a commitment of \$7,000,000 from the War Finance Corporation.

Our experience with the War Finance Corporation has been that they have at all times been willing to aid in the development of co-operative marketing, and our business with them has been characterized by promptness of action and a thorough spirit of co-operation. The commercial banks with whom we are doing business this year have shown a disposition to so adjust their methods of doing business that they may harmonize with the principles of co-operative marketing.

O. F. BLEDSOE, JR., President.

Alabama Does Not Expect to Call for Outside Financing.

Alabama Farm Bureau Cotton Association,

[Telegram to Manufacturers Record.]

Montgomery, Ala., October 19.

The Alabama Farm Bureau Cotton Association has 172,000 bales of cotton under contract; signing rapidly each day. On the basis of present delivery we expect to receive 100,000 bales. The War Finance Board extended \$3,000,000 credit. Alabama banks are co-operating fully and apparently will advance all money necessary. We do not expect to call on the War Finance Board. Total advances will reach \$5,000,000.

JOHN F. KERNACHAN, President.

North Carolina Association, Financed by Banks of State is Doing Large Business, Limited Only by Inadequate Warehousing—\$10,000,000 of War Finance Corporation Offered if Needed.

Georgia Cotton Growers Co-Operative Association,

Raleigh, N. C., Oct. 17.

Editor Manufacturers Record:

At the rate we are now receiving cotton we confidently expect to handle 20 per cent of the 1922 North Carolina crop of cotton, which will be approximately 150,000 bales. It is entirely possible that we may control 25 per cent of the crop.

The sign-up in this state is approximately 40 per cent of the entire crop, but on account of the crop lien system of this state we are losing thousands of bales this year.

By another season we hope to be able to control this situation by some change in our financial arrangements, and by the co-operation of the large fertilizer companies doing business in this state. These have already been approached on this subject, while nothing definite has been promised we are led to believe that these companies stand ready to lend a helping hand in putting over the greatest movement that has ever been launched for the benefit of the cotton farmers of the South and the South as a whole.

The supply merchants were approached too late this season for us to get their full co-operation. They could not make the necessary arrangements to help their customers in every instance in putting their cotton through the Co-operative Association. However, for the season of 1923 we are assured by large numbers of supply merchants that they are going to make every effort to co-operate with us. They are expressing themselves freely, that co-operative marketing is our only salvation, and that it has come to stay.

Arrangements for \$10,000,000 have been made with the War Finance Corporation for financing our Association. All of this is very much appreciated by our 31,000 members and the management of our Association. It is a reserve force that can be utilized if needed.

The banks of North Carolina have financed us, and they have done it well. We have not as yet borrowed a cent out of North Carolina and very probably will not. There are a few—a very few—banks in North Carolina which cannot claim any credit for helping to start this great co-operative effort for great good to all. With rare exceptions the banks

of our state have been ready and willing to cash all drafts on this Association at par and without question.

The warehousing question just now is our greatest trouble. No one could foresee how much would have to be stored. Under the old system of marketing cotton, if warehouses were filled to overflowing cotton could be dumped out in the weather, but every bale of Co-operative cotton must be warehoused as fast as delivered.

Greensboro, N. C., has an embargo on cotton now. The North Carolina Co-operative Association has over 200 loaded cars of cotton congested at Charlotte, N. C. Other warehouse points are running over. We are diverting cotton now to the port of Wilmington and will likely store a quantity at Norfolk, in order to relieve the congestion at interior points.

We believe in the orderly marketing of cotton and inasmuch as the outsiders have been such persistent sellers, we have as yet sold only a very limited amount of cotton.

U. B. BLALOCK, General Manager.

South Carolina Relying Entirely on Local Financial Co-operation, Though it Can Get \$10,000,000 from War Finance Corporation if Needed.

South Carolina Cotton Growers' Co-operative Association, Columbia, S. C., Oct. 17.

Editor Manufacturers Record:

With 50,000 bales already delivered and daily deliveries ranging from one to three thousand bales, the South Carolina Cotton Growers' Co-operative Association expects a total delivery for the season of at least one-fourth of the state's total crop. The association is functioning in a manner highly satisfactory to the business men of the state and to its own members, judging from the splendid co-operation and support which it is receiving from both.

Ninety-nine per cent of the banks of the state are strongly behind the organization. Not only are they assisting the members of the Association in making out their drafts, but they are having all members whose cotton is mortgaged to them to sell the cotton through the association. They are going a step further, many of them, and urging them to turn over what old cotton they have on hand to the Association. Many of them are urging their farmer customers who are not members to join. New contracts are being sent in daily by them.

The War Finance Corporation has granted the Association a line of credit of \$10,000,000, but the Association has not yet taken a cent of it, due to the loyal cooperation of the banks. We feel, however, that the War Finance Corporation has been of wonderful assistance to us in establishing lines of credit. The farmers of the country, we think, are under lasting obligations to it.

H. G. KAMINER, President.

Funds from Many Sources Available for Arkansas Association.

Arkansas Cotton Growers' Co-operative Association,

Little Rock, Ark., October 18.

Editor Manufacturers Record:

The Arkansas Cotton Growers' Co-operative Association is composed of 6300 farmers and cotton raisers of this state. We have a Board of Directors of twenty-three men, elected by the members. The membership have obligated themselves to market all of their cotton through the Association for a period of five years. During 1920 these members produced 215,000 bales. Based comparatively on crop conditions this year, these members will produce around 150,000 bales. We find, however, on account of mortgages and various changes, that we will not get that amount this season—probably 100,000 bales.

The banks in the city of Little Rock have extended to this Association a line of credit of \$3,000,000; the National Bank of Commerce and the First National Bank of St. Louis have

each extended \$1,000,000, and the Hibernia Bank & Trust Co. of New Orleans has extended the same amount. In addition to this line, which we think is sufficient to cover our operations, the War Finance Corporation has extended us a line of \$7,500,000, if we need it.

We have not tried for credit at any other places, but could, in this state, I think, without any trouble, find money to eliminate the three city loans mentioned. We have the full co-operation of all the banks of this territory, and our finances are the least of our worries.

We have an efficient selling organization and are having no trouble whatever in selling our cotton at good prices, and the consumers are not questioning in any way our responsibility.

In addition to the banks, we believe we have the good wishes and support of all the business people in the state, except those who feel that our success will directly interfere with their cotton business.

C. G. HENRY, President.

Strong Organization in Oklahoma, Prepared to Finance Every Bale in the State—Liberal Proffers by War Finance Corporation Will Probably Not Be Drawn Upon.

Oklahoma Cotton Growers' Association

Oklahoma City, Okla., October 18.

Editor Manufacturers Record:

The Oklahoma Cotton Growers' Association has a membership of 37,000, out of a total of about 110,000 cotton farmers in the state. The members of the Cotton Growers' Association, however, produce considerably more than one-third of the total amount of cotton grown in the state.

In our organization campaign we had the complete support of the Oklahoma Bankers' Association, and at the time of our organization, this Bankers' Association appointed a special committee, consisting of seven of the biggest bankers in the state, to advise with us on our various financial problems and to co-operate with us in doing anything that in the judgment of the committee might be deemed advisable.

This committee has met with us at our call and has rendered very valuable service, not only in Oklahoma but in helping to make financial arrangements out of the state.

The Oklahoma Cotton Growers' Association is able to borrow all the money it could use in financing not only the movement of the cotton grown by its members but we could finance every bale in the state, on terms that would enable it to market its cotton in an orderly manner throughout the year. This money is secured from the Oklahoma bankers and from various Eastern sections, including the National City Bank of New York.

During our first year we borrowed very largely from the War Finance Corporation and are under many obligations for courtesies and advice from Mr. Meyer and his associates. This year we have funds available from the War Finance Corporation in sufficient quantity to probably take care of all our business and under terms that are practical, but so far have not used a dollar of this money and do not think there is any likelihood that we will, but the fact that his money is available has made it much easier for us to complete negotiations in the various financial centers.

We have not only had the support of the bankers and the bankers' organization but the various Chambers of Commerce in this state have been free in their support of what we are trying to do and probably as effective service has been rendered by the press of the state as by any other agency, and in this connection we wish to express, in a special measure, our appreciation of the many splendid editorials which have appeared in the MANUFACTURERS RECORD and for the liberal manner in which we have been treated in your news columns as well.

C. L. STEALEY, General Manager.

Straight From the Shoulder Against Union Labor.

W. K. HENDERSON, President, The W. K. Henderson Iron Works and Supply Co., Shreveport, Louisiana.

I was the prime mover, in fact, brought open shop to Shreveport; a complete history of this you have had previously, but I told our crowd that this was only a stepping stone. To some little extent it has brought union labor to its senses, but open shop won't work—I have had the experience and I know it won't work. If you pack a bad cantaloupe in a crate of good cantaloupes and ship them, by the time the cantaloupes arrive at destination the whole crate is spoiled, and that is just what happens when you put union men among free workers.

In my particular line of work very frequently a man is doing a job on a machine and after the tool is set this man takes a seat for hours, while the machine does the work. My contention is that this man should go and start another machine to running, he should run both machines. Union rules will not permit union labor to do so. That is not right. By this same token, I say if it should take four men to run one machine, furnish the four men.

I WOULD BE FOR A CARD MAN IF THE CARD MEANT ANYTHING, BUT THE CARD DOES NOT MEAN ANYTHING. It proves that he belongs to an organization and not only he but any other man making application can get the same kind of card, whether he is a finished workman or not. THE UNION CARD IS A VERY FINE THING FOR A POOR WORKMAN but a DAMN POOR THING FOR A FIRST CLASS WORKMAN.

Great South Plains Country of Texas Turning to Agriculture—Settlers Wanted.

The western border of Texas is turning gradually from grazing to agriculture and horticulture, and even figs are grown in this great southwestern country, according to Mr. N. R. Morgan, an attorney of Seminole, Texas, who writes the MANUFACTURERS RECORD as follows:

"We are way out on the western border of Texas, in the heart of the great South Plains country, now evolving from a grazing proposition to an agricultural, horticultural, livestock and poultry region; we have millions of acres, 75 per cent of which will produce a greater variety and yield of the above products than any other territory; we are at an elevation of 3000 feet above sea level, yet we grow figs; the country is underlaid with an apparently inexhaustible supply of clean, clear, cold water, admirably adapted to all domestic purposes. Climate superior to that of California, with mild winters, cool summers, very healthy, no local cause for sickness; free of pestiferous insects; no diseases; the coming cotton country.

"Seminole, county seat of Gaines county, Texas, about the middle of 5,000,000 acres, with 95 per cent yet uncultivated, is waiting for and inviting the man with the plow and hoe, where homeseekers can live amid their own vines and fig trees, and all of the solid comforts of life. Now, this territory needs and must have transportation. The surface is undulating prairie plains, sandy soils with subsoils of clay and limestone."

New Orleans Erecting Two Service Sub-Stations.

New Orleans, La., October 14—[Special.]—The New Orleans Public Service Co., Inc., A. L. Kemper vice president and general manager, is building two sub-stations, one at Dryades & Union streets and the other in the 300 block on Bourbon street. Dwight P. Robinson & Co. Inc., of New York City have the general contract. Equipment is being furnished by the General Electric Co., Schenectady, N. Y., and the Westinghouse Electric & Manufacturing Co., East Pittsburg, Pa.

THE IRON AND STEEL SITUATION

Steel Production Maintained Despite Fewer Orders.

Pittsburgh, Pa., October 21.—[Special.]—Steel production has not decreased on account of the diminishing volume of orders placed in the past six or seven weeks as all the mills have sufficient business on books to keep them going for the present. As to the future, there are wide divergences in the size of order books, arising of course from the different price policies pursued by the various producers in the past few months. Some mills will probably have occasion to curtail operations in the near future while others will continue going strong.

Production of steel ingots continues at a rate of 36,000,000 tons a year, or a trifle more, or at say 70 per cent of capacity. This is approximately equal to the highest rate of the year, attained last June, while it is nearly double the average rate in 1921 and is 20 per cent above the production in 1912 and 1913, the two greatest tonnage years before the war. The fact that the production represents only 70 per cent of capacity merely shows how greatly capacity has been increased.

Car shortages, in the matter of shipping finished product, are still reported by the mills, but on the whole car supplies are probably somewhat better than a fortnight ago. Steel does not seem to be accumulating at mills, but little of the steel previously accumulated has been moved. There are fewer embargoes than two or three weeks ago so that not so many buyers are shut off from their usual sources of supply. Some of the recent buying represented duplication, the buyers having steel due them on old orders, but not receiving adequate deliveries.

The past week has been the quietest in finished steel products, in point of actual turnover in the market, of any week this year. Buying for late delivery diminished to small proportions in September, while now the prompt buying is greatly decreased. The quietness in the market reflects better deliveries rather than a decrease in actual consumption, though as winter approaches the usual seasonal decrease in consumption is to be expected.

Lettings of fabricated steel contracts in the past six months averaged 70.9 per cent of the fabricating shop capacity, being 86.6 per cent in April and 61.9 per cent in September.

Prices of finished steel products for forward delivery show no weakening, and none is to be expected for some time. Even mills that may run somewhat short of orders will hardly cut prices to secure additional business as they will still have some old business on books to protect. Premiums for prompt shipment, on the other hand, are likely to disappear entirely in a few weeks, being already considerably less than a month ago. Forward prices are 2.00c for bars, shapes and plates and 3.50c for sheets, while prompt deliveries can be had at about 2.15c for bars, 2.25c for plates and 3.60c for sheets. Plain wire is at 2.45c and nails at \$2.70 for any delivery.

The National Tube Company (Steel Corporation) under date of October 19 made a general advance in its prices on welded tubular products of two points or about \$4 a net ton. The action came as a surprise to the trade. In the past six months the general policy of the Steel Corporation has been merely to follow, after an interval, advances made by independents. The basing discount on merchant steel pipe changes from 68 to 66 per cent.

Connellsville coke has been rapidly declining and is beginning to approach a reasonable level. For several weeks, and until about ten days ago, furnace coke was firm at \$12, while in the past couple days it has been offered freely at \$8 without finding many takers. There is increased production while the softness of the market causes consumers to defer purchases. Pig iron has started to decline to a reasonable level, under the influence of declining coke prices and an almost complete ab-

sence of inquiry, consumers being evidently unable to pay prices recently asked. Recent offerings have been of Bessemer at \$33, basic at \$30 and foundry at \$32, valley, but these slight declines do not interest buyers and further concessions will be made when consumers show a disposition to negotiate.

Believes Coal Storage Feasible and Desirable.

R. H. Beaumont Co.

Contractors, Coal, Coke, and Ashes Handling Systems

Editor *Manufacturers Record*:

Philadelphia, Pa., October 12, 1922.

I have read with interest the article on "Merits and Demerits of Coal Storage" by Geo. H. Cushing, in your issue of October 5, 1922.

For 30 years I have been identified with the design and construction of coal storage plants. I cannot agree with all the difficulties Mr. Cushing sets forth against the storing of bituminous coal. He cites anthracite storage which is commonly practiced as an argument against bituminous storage in that it has not accomplished the principal aims of storage.

It seems to me that the necessity of storing coal is beyond argument. Every one who burns coal stores it, from the smallest, to the largest user. The only question is, should bituminous coal be stored in much larger volume in order to smooth out the poor delivery periods caused by mining and transportation difficulties.

I cannot recall a single product or article of consumption which is not stored in large quantities in order to equalize the interruption of supply between producer and consumer. It may be true that this storage is never done except for profit. I cannot help but feel that it must be done for another reason, and that is the necessity of the situation.

R. H. BEAUMONT, President.

Power and Mechanical Exposition in New York.

The National Exposition of Power & Mechanical Engineering to be held at the Grand Central Palace in New York December 7 to 13, is being planned in cooperation with the national societies interested in economy of fuel and in the production and use of power generated therefrom. The program has been so arranged that all members attending the annual meeting of the American Society of Mechanical Engineers may get the advantage of the technical discussions. In addition the professional divisions on aeronautics, ordnance and forest products will hold sessions.

For three days beginning December 5, the American Society of Refrigerating Engineers will meet at the Hotel Astor. The National Association of Stationary Engineers is planning to have its various chapters visit the exposition in a body. The New York Building Superintendents' Association, 600 strong, will attend.

Already the list of exhibitors in the Grand Central Palace assures a great exhibition of power plant equipment.

New Vessels to Aid Mobile's Trade.

With the addition of two new Shipping Board vessels to the Page & Jones fleet and with the completion of a deal which will bring three large Luckenbach liners to Mobile, Ala., shipping authorities of that city predict that Mobile business in general as well as shipping will show a big improvement within the next few months. The steady increase in trade between Mobile and European and Pacific coast ports has necessitated the addition of the vessels.

Kennedy Bros., Inc., Washington, D. C., are erecting a five story apartment house, after plans by Sonnemann & Jostement, architects of that city. H. F. Lucke is the engineer.

RAILROADS

New Equipment Orders.

Baltimore & Ohio Railroad has ordered 2 heavy electric locomotives from the General Electric Co., each to cost over \$60,000. This system has also ordered 30 baggage cars from the American Car & Foundry Co.

Santa Fe System's order for freight cars has been distributed thus: 1000 refrigerator cars, 1000 automobile cars, 500 stock cars, from the Pullman Co., Chicago; 1000 refrigerator cars, 500 gondola cars, 500 box cars, 150 caboose cars, from the American Car & Foundry Co.; 500 box cars, from the Standard Steel Car Co.

Tennessee Coal, Iron & Railroad Co. has ordered 195 freight cars from the Chickasaw Shipbuilding Co.

Interstate Railroad is reported to have ordered 1000 box cars of 55 tons capacity from the Pressed Steel Car Co.

Knoxville & Carolina Railroad has received a gasoline motor car from the J. G. Brill Co., of Philadelphia, for use between Knoxville and Sevierville, Tenn., about 30 miles. It accommodates 42 passengers.

Rock Island Lines have ordered 30 mikado type locomotives and 10 mountain type from the American Locomotive Co.

United Railways & Electric Co. of Baltimore has received the first delivery on its order for trackless trolley cars to be operated on a suburban route.

Equipment inquiries recently reported in the market include 9 Pacific type locomotives for the Southern Pacific System, 100 tank cars for the Texas Company, 500 flat bottom gondola cars of 100 tons capacity and 500 steel gondola cars of 120 tons capacity, for the Virginian Railway, and 2 eight wheel switching locomotives for the Richmond, Fredericksburg & Potomac Railway.

Car Conditions and Freight Traffic.

The American Railway Association reports for the week ended October 7 total loadings of all classes of revenue freight, 968,169 cars, a decrease of something more than 20,000 cars as compared with the previous week, but over 68,000 cars more than were loaded during the corresponding week of last year. About three-quarters of the decrease was due to fewer carloads of merchandise and miscellaneous freight, including manufactured products. Because of the extremely heavy demand for cars in all parts of the country there has been a marked increase in the extent to which the capacity of all cars, but especially for these commodities, has been utilized, so that more freight was carried in a less number of cars. The demand for freight cars in excess of supply amounted to 141,252 cars, an increase of nearly 11,000 cars as compared with the previous week. The Association also notes that on October 1 there were 32,929 less freight cars in need of repairs than there were on July 1, when the shopmen's strike began.

Railroads Average Less Than 3 1/2 Per Cent Net.

According to reports of the railroads to the Interstate Commerce Commission their net operating income during the two years period from August 31, 1920 to the same date of this year was at the annual average rate of only 3.47 per cent on their tentative valuation, instead of from 5 1/2 to 6 per cent as contemplated in the Transportation Act. Of course, some of the lines on which conditions were most favorable earned considerably more than the average, but others earned considerably less. Since March 1, 1922 the average annual rate which the lines are expected to earn, by having rates fixed so as to yield it, has been and still is 5 1/4 per cent, as announced then by the Interstate Commerce Commission.

Railroad Records Broken During the Strike.

How at least one railroad met and successfully overcame strike difficulties is shown by a statement issued by President W. A. Winburn, of the Central of Georgia Railway Co., which gives details as to efficiency records broken during the time of stress. He says:

"During July, August and September this company handled a total of 200,708 loads against 189,135 for the three months previous to the strike, an increase of 11,573 revenue loads, or 6.1 per cent. This volume of business is only 2135 loads or 1 per cent less than the peak period of our entire history, August, September and October of 1920.

"During the three months just passed this company operated 8720 passenger trains, of which 8519 or 97.7 per cent were on time or maintained schedule. It operated 1230 fast freight trains, of which 996 or 81 per cent were on time or maintained schedule.

"More coal was loaded on this railway during July, August and September than during any other three months in its history—a total of 6174 cars, an increase of 2219 or 56 per cent over the three months just preceding the strike.

"Four new efficiency records were established during the month of September as follows:

"We handled the greatest number of tons of freight in our history. We moved our cars faster than is shown by any previous record, having maintained a daily average of 34.19 miles per car per day, a mileage exceeded by very few railroads in the United States. The net ton miles per car day was 613, the highest ever attained by this company, and the per cent of loaded car miles to empty car miles was 78, the highest of record.

"Our shops have attained an almost normal condition. Prior to the strike we had 2111 men. Now we have 2008 or 95 per cent. The general repairs to cars and engines are being made in an entirely satisfactory manner, the output of cars actually surpassing that prevailing before the strike. A contract has been signed with our present shop employees, who voluntarily organized and opened negotiations. The management will not deal with any organization whose men are not at the time in our employ. The strike is a closed incident."

Good Business Southwest—Railroad Improvements.

While on a visit to Dallas, Tex., after having inspected the oil handling facilities at Galveston, President Daniel Upthegrove, of the St. Louis Southwestern Railway, stated that business in Texas and elsewhere in the Southwest is unusually good, that the railroads are enjoying an era of prosperity and there is a heavy movement of practically all commodities.

Continuing he said that the locomotives on the St. Louis Southwestern lines will be converted from coal burners to oil burners and that it is expected the transformation will be complete within two years. This will enable the road to operate more economically and to give better service.

Mayor Aldredge, of Dallas, having suggested to the company that its line between Dallas and Greenville, Tex., about 60 miles, be changed to electric operation in conjunction with steam operation, President Upthegrove is quoted as saying that a thorough investigation of the proposition will be made to discover whether the change proposed would be practicable.

Motor Busses and Trucks in Mexico.

Mexico City, Mexico, October 20—[Special.]—An order has been placed in England for fifty double-deck motor busses by the Mexico City Traction Company, Ltd., which operates the electric street railway system here. The busses will be equipped with both electric and gasoline power, one to be held in reserve for emergency use. The vehicles will each accommodate about fifty passengers. They will be placed in operation on streets where there are no street railway lines and

will serve populous quarters which are now without transportation facilities. If the busses are a success it is expected that others will be placed in service to suburban towns.

Plans are also on foot for the establishment of motor truck freight lines between the capital and various cities of this part of Mexico. Some hauling of this character is now being done, but when the proposed lines are put into effect, which will be about the first of the coming year, motor trucks will handle shipments between Mexico City and Toluca, Puebla, Pachuca, Cuernavaca and even more remote points. Motor truck routes are also to be established out of Guadaluajara, Monterey, Torreon and Chihuahua. Most of the heavy hauling in the Gulf Coast oil region is now being done by motor trucks.

Safe and Economical Packing of Freight.

Referring to the campaign of the American Railway Association to reduce the volume of freight damage claims by securing better packing of freight, as published in the MANUFACTURERS RECORD of October 5, J. C. Nellis, secretary of the North Carolina Pine Box and Shook Manufacturers' Association, 433 Calvert Building, Baltimore, writes: "It is our information that wooden boxes are less responsible for the large losses and damage in transportation than other kinds of containers. We fully agree with the necessity for proper packing."

Mr. Nellis encloses with his letter a statement that members of the National Association of Box Manufacturers (of which his organization is a division), were supplied in September with the rule for the selection and application of metal strapping on nailed wooden boxes.

This rule covers boxes up to 1000 pounds gross weight. The application of the specified strapping allows reduction of thickness of sides, tops and bottoms 25 per cent with one strap and 40 per cent with two or more straps. In addition to the saving of lumber there is a saving in the weight which is reflected in the freight on shook and boxes to the consumer and in the consumer's outbound freight.

As an example, a Style 2, all 13/16 box containing nearly 33 feet board measure, can by balanced design and the use of two straps, be reduced to contain 18½ feet. The total saving in weight would be 2550 pounds per 100 white pine boxes and the total saving in transportation charges (shook rate at 20 cents and loaded rate at 75 cents), would be nearly \$24 per 100 boxes. At 4 cents per box for straps and labor there would be a saving of nearly 20 cents per box, not including saving in lumber.

Rumor That Ford Will Buy a Railroad System.

Austin, Tex., October 23—[Special.]—One of the many Ford rumors is a report widely circulated among the employees of the Missouri, Kansas & Texas Railroad that Henry Ford plans to buy that system when it is sold at the foreclosure sale October 26. It is said that Mr. Ford has had representatives going over the road making an investigation of the property and its future traffic possibilities and that their final reports are now in his hands. According to the current reports, it is Mr. Ford's desire to obtain an outlet to the Gulf of Mexico and to the Mexican border from St. Louis and Kansas City.

Railroad Financing.

Texas & Pacific Railway has applied to the Interstate Commerce Commission for authority to issue \$810,000 of 5 per cent equipment trust certificates to cover recent orders for rolling stock.

Norfolk Southern Railroad has been authorized by the Commission to issue \$375,000 of equipment notes.

Louisiana & Arkansas Railway has been authorized to sell

\$470,000 of 5 per cent bonds to cover additions and betterments made.

Nashville, Chattanooga & St. Louis Railway is authorized to assume obligations to pay interest and principal of \$1,800,000 of equipment trust securities issued on account of its late purchases of cars and engines.

Atchison, Topeka & Santa Fe Railway and subsidiary companies have been paid \$21,500,000 by the Government in final settlement of claims for the period of Federal control.

Investigating a Railroad Project.

A report from Greenville, Tenn., says that Leroy Park, representing New York interests, has been investigating the country in that vicinity with the idea of building a railroad to connect Greenville, Kingsport, Bristol and other points. It is further stated that the proposed line may be operated by electricity.

Louisville Now in Midst of Period of Great Activity in Building.

Louisville, Ky., October 21—This city is entering upon a period of unprecedented building development. Periodical announcements of new construction projects, involving the expenditure of big sums, strikingly illustrate the confidence the leaders in the industrial and commercial world have in the city's future. Definite announcement of plans for the construction of a \$3,500,000 hotel to be known as The Brown, coming on top of the proposal of the Seelbach interests to build a large hotel, have an important bearing on the rapid development of Louisville.

Another encouraging sign is the increasing interest manifested in establishing river terminals. An entire block recently purchased on the river front may be used as a site for a \$1,000,000 warehouse. The Producers Wood & Preserving Co. is constructing a new plant and in addition many other structures are contemplated for erection in the new future.

Contract Awarded at Norfolk for New Pier to Cost Nearly \$680,000.

Norfolk, Va., October 21—Contract was awarded by the City Council this week to the Raymond Concrete Pile Co. for construction of a pier, 1200 feet long and 494 feet wide near the new municipal grain elevator which is rapidly being completed. The newest addition to the city's municipal terminal development will cost about \$680,000, funds being provided out of the \$5,000,000 bond issue voted for the purpose.

The Raymond Company has been engaged for some time on work in connection with the grain elevator, and because its organization and equipment was on the ground it made a very attractive offer for constructing the pier which was approved by the City Council. The pier will be able to take care of cargoes of a nature that could not be handled at the Army Base piers, and being close to the grain elevator will facilitate loading vessels with mixed cargoes, making it unnecessary to move them to other piers at a distance.

Two New College Buildings to Cost \$400,000.

Galveston, Tex., October 14.—Plans are being prepared by Herbert M. Green, of Dallas, for two new buildings at the State Medical College to cost approximately \$400,000. One building will house the general laboratories, museum and library. The other structure will be a complete power plant for heating, power and light in the adjoining buildings of the hospital and college group.

Will Erect Church Building.

Henderson, N. C., October 21—The First M. E. Church South, Rev. T. G. Vickers pastor, plans the erection of a \$150,000 church in the near future. An architect has not yet been selected.

GOOD ROADS AND STREETS

Important West Virginia Highway Nears Completion.

Welch, W. Va., October 21—Prospects for the early completion of the highway that will give McDowell county and contiguous territory an outlet to the Ohio River grow brighter. According to W. S. Rosenheim, secretary of the Williamson Chamber of Commerce, all parts of the Tug River section will be contracted for by the first of January next.

In August Lincoln district, Wayne county, voted a bond issue to provide for one of the most important links. Engineering work is now complete on a stretch of 35 miles.

In June the State Roads Commission let a contract for 12 miles of road in Pigeon Creek, Mingo county. These two projects will cost \$700,000.

There are 18 other projects totaling 18 miles to be provided for—8 miles in Mingo county and a similar stretch in the Huff creek section and two miles in McDowell county.

The Tug River highway extending from Bluefield to Huntington by way of Welch and Williamson will be about 175 miles long. Its completion will be of real interest to motorists in half a dozen states, and the operation of numerous bus lines is expected to follow.

\$400,000 in Road Contracts Awarded.

Richmond, Va., October 21.—Road contracts were awarded by the State Highway Commission this week for a total of \$400,000. The projects are as follows:

Surface treated macadam roadway between New Baltimore and Manassas, 3.3 miles, to L. J. Chandler, at \$53,000.

Bituminous macadam south of Staunton, 5 miles, to Pace Construction Co., Roanoke, at \$137,661.

Bituminous macadam connecting Clintwood and Fremont, in Dickerson county, 1.1 miles, to Clintwood Construction Co. at \$34,428.

Concrete streets in Halifax, 1.84 miles, to Southern Construction Co., Petersburg, \$56,743; and

Concrete road, Martinsville to Daniel's Creek, 4.44 miles, to W. W. Boxley & Co., Roanoke, at \$119,483.

Perfecting Details for Good Roads Congress and Show at Chicago in January.

Elaborate details are being perfected by the American Road Builders' Association in connection with the Thirteenth American Good Roads Congress and Fourteenth National Good Roads Show to be held in Chicago, January 15 to 19. While the show will be held as formerly in the Chicago Coliseum the business sessions will take place at the Congress Hotel.

The convention and show committee consists of C. M. Upham, chairman; James H. MacDonald and S. F. Beatty. Subcommittees composed of active members of the organization have been appointed to direct the various activities. C. W. Kelley, of Chicago, has been appointed director of exhibits, and C. S. Lee, of New York, has been named publicity director.

Notes on Good Roads Construction.

A contract for building 6.56 miles of concrete road south of Kennett, Mo. towards Senath has been awarded at a cost of about \$150,000.

Contract for the first concrete public highway to be constructed in Yazoo county, Miss., has been let to the Williams & Lobby Engineer Service Corporation, at a cost of \$140,000.

The Padoe-Gillespie Company, of Fairfax, Va., has been awarded the contract for Project No. 168, Route No. 6, by the State Highway Commission, Richmond, Va. The road is 5.1 miles long, 16 feet wide, of bituminous macadam, and will cost about \$130,000.

Contract Let for Concrete Road to Cost \$315,000.

The contract for building a concrete road along the Liberty-Kansas City highway, out of Kansas City, Mo., has been awarded to the American Paving Co., of Omaha, Neb. The road which is 18 feet wide will cost approximately \$315,000.

Situation in Coal Fields still Far from Settled.

Charleston, W. Va., October 21—[Special.]—A car shortage in all the coal fields of West Virginia is limiting production to about 30 per cent of potential capacity—smaller than it was at the height of the coal strike, previous to last July, when the shopmen's strike brought a halt to the large production. Even the adjustment of the trouble between the railroads and striking employes has not helped matters much so far, owing to the run-down condition of equipment when the strike was brought to an end on the Baltimore & Ohio and the Chesapeake & Ohio. Neither the Western Maryland, the Norfolk & Western nor the Virginian has made any agreement with strikers and they are operating their lines on the open shop basis.

The utterance a few days ago of President John L. Lewis, of the United Mine Workers of America, that the miners' union would stand pat on its present wage scale leads many West Virginia mine owners to believe that there will be another strike next April, in which event the consuming public will be dependent upon the open shop mines of Virginia, West Virginia, Kentucky and one or two other southern states. More mines will be able to operate than at the beginning of the last strike, owing to the fact that more companies are operating on the open shop plan, and that is one of the reasons they refused to sign an agreement with the union on the basis of the Cleveland plan.

Most West Virginia producers are agreed that legislation such as that incorporated in the coal control bill recently enacted by Congress and other legislation proposed as a panacea for coal shortages is not only inimical to the industry as well as to the public, is a step toward socialization of industry, centralization of power and government control, but is misdirected and they declare that the remedy is to be found in more adequate public preparation for shortages, in paying less attention to propagandists and in improving transportation facilities. With mines limited to a working time of one and two days a week, it is pointed out by producers that production costs are bound to be high, and that the public should take these facts into consideration.

Contract Let for Construction of Dover Mill.

Shelby, N. C., October 21—The Fiske-Carter Construction Co., of Greenville, S. C., has been awarded the contract for erection of the new Dover Mill here. It will be a three story structure of steel and concrete. The company which was recently organized has increased its capital to \$500,000. A total of 11,000 spindles will be installed. J. W. Branton, of this city and P. P. Self, of Cherryville have been awarded contracts for the erection of 65 tenement houses, for use of the employees. Work has been under way for some time on a siding to facilitate delivery of the necessary building materials.

\$250,000 Company Formed for Land Development.

The Moore County Farms, Inc., has been organized with an authorized capital of \$250,000 and plans the development of 2000 acres of land near Pinebluff, N. C., at an approximate cost of \$200,000. W. N. Hutt, Southern Pines, is the engineer in charge. The company owns in all 28,000 acres of land. T. S. Malin is president; F. S. Vernay, vice president and J. H. Dyer, secretary.

LUMBER AND BUILDING MATERIALS

Heavy Lumber Production, With Slack Shipments.

Washington, October 20—[Special.]—The composite report of 375 of the largest sawmills in America as compiled by the National Lumber Manufacturers Association from reports from eight regional associations, tells this week a story of immense production and intense activity in the lumber mills and logging camps of the country.

Of these mills 347 have an established normal rate of production and present output is 99 per cent of that, says the association. But this "normal" is a peculiar one; for some mills it is the rated capacity of the mill under ordinary conditions and running full time. For other mills it is the average production of a specific period. Consequently the present rate of production for some mills and regions is vastly above their normal and for others far below it. On the whole, though, if normal production were taken to represent the average production during the last five years, the present rate of production would be considerably more than 100 per cent of normal.

Production of lumber by all the reporting mills for the week ending October 14 was 236,958,030, which is about 3,000,000 feet more than for the preceding week and about 40,000,000 feet more than the average weekly production for 1919, 1920 and 1921. On the other hand shipments declined a negligible amount to 176,172,466 feet and have now fallen to about the average level of weekly shipments in the three years before 1922, and are about 22,000,000 feet below the average during the first seven months of this year. Orders continue to register decreases, the falling off in the past week being more than 4,000,000 feet, and they are now almost down to the weekly average of the three past years and about 35,000,000 below the weekly level of the first seven months of this year.

In consequence of this situation the surplus of accumulated orders over shipments, which has hitherto been a source of anxiety, is decreasing and the mills are beginning to stock up. This is interesting to the lumber buying public, according to the association, but is not very attractive to manufacturers who find themselves compelled to reject orders in a year particularly favorable to their business from a selling standpoint but now become abnormal from a shipping point of view. Shipments are only 70 per cent of normal and orders but 74 per cent. With respect to current production of all the reporting mills shipments are 74 per cent and orders 75 per cent.

The figures for the past week as compared with the preceding week (375 as against 379 mills) and the equivalent week of 1922 follow:

	Last Week.	Same Week, 1921.	Preceding Week.
Production	236,958,030	174,929,762	233,611,074
Shipments	176,172,466	189,391,855	177,008,222
Orders	178,382,445	218,231,659	182,738,122

For the first 41 weeks of the year as compared with a like period of 1921 the figures are:

	Production.	Shipments.	Orders.
1922	8,789,267,472	8,448,341,712	8,967,422,997
1921	6,365,987,550	6,371,001,604	6,625,607,310
1922 Increase....	2,423,279,922	2,077,340,108	2,341,815,687

Conditions at North Carolina Mills.

Norfolk, Va., October 21—Reports from 39 mills of the North Carolina Pine Association for the week ended October 14 show receipt of orders totaling 8,661,033 feet, or an average per mill of 222,077 feet. Shipments aggregated 9,245,120 feet, giving 237,954 feet as the average shipment. Production was 9,040,029 feet.

Orders received during the week were 6 per cent below shipments and 4 per cent below the actual production. Shipments were 2 per cent above production. There was a decrease of 4.5 per cent in orders as compared with the preceding week.

Will Standardize Metal Lath Products.

Following the suggestion of Secretary of Commerce Hoover, the metal lath manufacturers are preparing to cut excess varieties out of their long list of metal lath products, and reduce them to a minimum.

A preliminary meeting was held with Wm. A. Durgin, of the Department of Commerce, on October 2, and a formal meeting has been arranged for December 12, when architects, plasterers, lathers, contractors and dealers will be invited to a joint conference.

W. B. Turner, of the General Fireproofing Co., Youngstown, Ohio, is chairman of the Industry Committee, and Wharton Clay, Chicago, Commissioner of the Associated Metal Lath Manufacturers, is secretary.

The rapidly increasing use of metal lath due to its recognition as a fire protection and crack prevention medium, has put great pressure on the industry for a reduction of the number of sizes, styles, varieties and finishes.

Southern Pine Production Far Above Orders and Shipments.

New Orleans, La., October 27.—Reports from 131 mills of the Southern Pine Association for the week ended Friday, October 13, show receipts of orders totaling 2768 cars containing 60,865,552 feet, or an average of 464,623 feet per mill. Shipments during the week totaled 2570 cars, amounting to 56,511,730 feet, the average per mill being 431,387 feet. Production of 131 mills was 75,646,607 feet, the average being 577,455 feet.

Shipments for the week were 25.30 per cent below production. Orders were 19.54 per cent below production and 7.70 per cent above shipments. The increase in orders on hand during the week amounted to 1.13 per cent. The total unfilled cars on order at the end of the week was 17,647, and the average unfilled order per mill was 2,962,137 feet.

The summary report for the week is as follows:

	Cars.	Feet.
Orders on hand beginning of week.....	17,449	383,886,061
Orders received during week.....	2,768	60,865,552
Total.....	20,217	444,551,613
Shipments during week.....	2,570	56,511,730
Orders on hand end of week.....	17,647	388,039,883

Knoxville Building Continues Its High Climb.

Knoxville, Tenn., October 21—Building permits issued to October 11 this year have a total value of \$3,400,000 according to Mortimer Thompson, building inspector. Permits issued during the whole of 1914 were valued at \$490,468. Real estate men will not say that the city is in the midst of a building boom, but state that the steady increase in building values is due to the influx of people desiring to live in Knoxville. Indications are that the total building value for 1922 will be about double that of last year. Recently many permits have been issued for new business houses, warehouses and for remodeling and enlarging similar structures.

Order of Roofing and Floor Tile for Bahama Hotel.

Chattanooga, Tenn., October 28—B. Mifflin Hood Brick Co., of Atlanta, Ga., with a plant at Daisy, have received orders for 16 carloads of roofing and floor tile to be used in the construction of a large hotel at Nassau, Bahama Islands. This is the second large order received by the company for export within the past 30 days.

The citizens of Big Stone Gap, Va., have launched a campaign for the establishment of a brick plant. Large quantities of shale and clay suitable for brick-making are within easy access.

Second Edition of Southern Pine Floor Booklet.

New Orleans, La., October 21—A second edition of 10,000 copies of the Southern Pine Association's booklet, "Beauty Plus Service in Floors" has just come off the press, and is being distributed to architects, builders, lumber dealers and consumers generally.

It is a handsomely illustrated publication with views of buildings in various parts of the country in which Southern pine flooring has been used. The text includes detailed directions for laying, finishing and care of Southern pine edge grain floors.

\$500,000 Apartment House for Sarasota, Fla.

Ralph C. Caples, of Chicago and Sarasota, Fla. plans the construction of a \$500,000 apartment house at Sarasota. The new structure is to have 100 modern apartments on the upper floors and 16 stores on the ground floor.

\$200,000 Dormitory to Be Erected.

A dormitory is to be erected at Williamsburg, Va., by William and Mary College at a cost of about \$200,000. Chas. M. Robinson, of Richmond, is the architect. The structure will be 40 by 250 feet, and four stories high.

Commendations, Kicks and Comments

From a Mississippi Banker.

D. L. BINGHAM, Bank of Indianola, Indianola, Miss.—By all means you are authorized to renew my subscription to the MANUFACTURERS RECORD from date of present subscription.

It's the greatest thing I get. Go to it.

Would Not Miss a Copy.

R. S. FALLS, Union, S. C.—Find enclosed \$6.50 for renewal of my subscription. I am glad to be able to read the RECORD. I want you to keep up your good work. You have got the best paper in the United States. Don't let me miss a copy.

A Fair Deal To All.

R. B. McMAHON, Mgr., The McMahon Land Company, Greenville, Miss.—It is a pleasure to renew our subscription for your publication. Your defense of the farmers, carriers and the workers, based on a fair deal to all, is commended by all good Americans.

Would Be Very Much Inconvenienced Without It.

F. T. HERRING, D. B. Morrison Company, Morriston, Fla.—Please pardon delay in getting our check for subscription to you. Your journal is the best publication coming to our office, and we would indeed be very much inconvenienced by its non-appearance.

Information Not Found Elsewhere.

HANCOCK & DAVIS, General Contractors, Beaufort, N. C.—Enclosed please find our check for \$6.50 on subscription to the MANUFACTURERS RECORD. We read the RECORD regularly and from its columns find information not published in any other publication. Please send us sample copy of the DAILY BULLETIN and the subscription price.

An Open Shop Believer.

JOHN T. BLEVINS, General Building Contractor, Van Buren, Ark.—Please accept my delayed check for \$6.50 for one year's renewal. You may always count on my subscription, as I have found your industrial service worth many years' subscription to your RECORD. I especially agree with you on your industrial position. I am an open shop believer and have been running my business that way for several years, and expect to continue the open shop plan.

Worth Many Times Its Cost.

OTIS PHOSPHATE COMPANY, Dunnellon, Fla.—Enclosed please find check for \$6.50. I have been a constant reader of the MANUFACTURERS RECORD for 15 years. I prize it more than all the journals I read. It has been worth more to me than five times its cost. Being a Prohibition man from my childhood, I heartily endorse your messages of October 7 to Hon. Warren G. Harding, President of the United States, and Hon. H. M. Daugherty, Attorney General. Long may the MANUFACTURERS RECORD live and carry on its good work.

MECHANICAL

Small Revolving Steam Shovel.

A new 1¾ yard steam shovel just placed on the market carries as regular equipment a 25 foot boom, a 17-foot dipper handle and a 1¾ yard dipper. It is readily convertible into dragline, clamshell or orange peel excavator or material handling crane and it can be furnished with either rigid or flexible crawler mounting, traction wheels or railroad wheels. Should longer reach and higher dump be required either a 28½ foot or 32 foot boom can be furnished by the builders, the Marion Steam Shovel Co., Marion, Ohio.

This shovel, it is stated, is designed with abundance of power and strength so that it is readily adapted to the heaviest and most severe work suited to shovels of the small



THE SHOVEL IN OPERATION.

revolving type. It is the company's largest model in its group and its field of application is so extensive that practically every kind of shovel work is included; there is hardly any kind of digging or material handling work to which it cannot be efficiently applied. For work in strip pit mines, in conjunction with large revolving shovels of the same make it can be regularly furnished with special attachments for leading coal direct into mine or railroad cars. It is particularly desirable for rock quarries, sand and gravel plants, clay pits, mining and stripping operations, handling slag or ore, and every description of contracting work.

On standard and high lift shovels the boom and the dipper handle are of the combination wood and steel type. On dragline, clamshell and orange peel excavator the boom is of all-steel construction spread at the foot to resist side sway when starting and stopping are sudden. With shovel equipment the dipper is of the "manganese front" type, the entire front being a manganese steel casting extending from the top to the bottom of the dipper and around the corners, where it is securely riveted to the side plates. It is heavy and strong and is designed to withstand the wear and shocks incident to the handling of hard material. Either manganese or forged teeth are furnished as may be desired.

New Post Office Building for Atlanta.

Atlanta, Ga., October 21—J. W. Jenkins has the contract for erection of \$150,000 post office building here. It will be 145 by 180 feet, of structural steel and hollow tile, with a first floor height of 16 feet and a large basement. There will be four entrances to the large building which is located close to the railroad terminals.

Construction Department

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained. Further facts about any incomplete or incorrect item reported in these columns are always appreciated.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers, and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$20.00 a year.

Bridges, Culverts and Viaducts.

Fla., Milton—Santa Rosa County Comms. For full details see Mch. Wanted—Bridge Construction.

Fla., Otter Creek—For full details see Mch. Wanted—Road and Bridge Construction.

Fla., St. Petersburg—For full details see Water Works.

Miss., Gholson—Noxubee County, Board of Supvrs., Macon, Miss., will build wooden bridge. For full details see Mch. Wanted—Bridge Construction.

Miss., Oxford—Lafayette County Board of Supvrs., will build 3 bridges. For full details see Mch. Wanted—Bridge Construction.

Miss., Yazoo City—For full details see Road and Street Construction.

Missouri—State Highway Dept., Jefferson City, Mo., plans following bridges:

Mississippi County, on State road from Charleston to New Madrid; Federal Aid Project No. 198-A.

Sta. 478 plus 30, over Drainage Ditch; 40-ft. I-Beam span; 2 reinforced concrete abutments; wood floor; 18-ft. roadway; Frank B. Newton, Div. Engr., Sikeston, Mo.

Gasconade County, near Mt. Sterling, on Jefferson City and St. Louis road; over Gasconade River; Federal Aid Project No. 219; 200-ft. steel truss, three 95-ft. steel truss, two 35-ft. I-Beam, and three deck plate girder spans; concrete abutment; 4 reinforced concrete pile bents; 5 reinforced concrete piers; 20-ft. roadway; concrete floor; S. M. Rudder, Div. Engr., Bristol Bldg., Webster Grove, Mo.; Waddell & Son, Consult. Engrs., Kansas City, Mo.

Carroll and Lafayette Counties, at Waverly; over Missouri River; Federal Aid Project No. 220; two 420-ft., three 250-ft., 200-ft., and 125-ft. steel truss spans; 2 reinforced concrete bents; 6 reinforced concrete piers; concrete floor; A. C. Lingley, Div. Engr., Reliance Bldg.; Harrington, Howard & Ash, Consult. Engrs.; all Kansas City, Mo.

Lafayette and Ray Counties, near Lexington; 3072-ft. long; three 250-ft., two 190, two 100-ft., deck steel truss spans; six 50-ft., two 25-ft., three 24-ft., and two 45-ft. steel deck girder spans; concrete floor; 2 reinforced concrete bents; 20-ft. roadway; steel bent; 5 steel towers; 11 piers; A. C. Lingley, Div. Engr., Reliance Bldg.; Waddell & Son, Consult. Engrs.; all Kansas City, Mo.

Howard and Saline Counties, Waverly, Mo., National old Trail road; over Missouri River; Federal Aid Project No. 217; 344-ft. and three 316-ft. thru steel truss spans; thirty-nine 22-ft. and five 23.5-ft. deck steel truss spans; 2-ft. steel towers; 6 reinforced concrete piers; 20-ft. roadway; wood floor; R. W. Hodson, Jefferson City, Mo., and A. C. Lingley, Div. Engrs., Reliance Bldg., Kansas City, Mo.; F. W. Adgate, Consult. Engr., Rookery Bldg., Chicago, Ill.

Dallas County, on State road from Bolivar to Buffalo; State Project No. 13, Sec. 58.

Sta. 827 plus 70, over Linley Creek; 30-ft. reinforced concrete deck girder span; two 20-ft. reinforced concrete slab spans; 20-ft. roadway; 2 reinforced concrete abutments; 2 concrete piers; H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo.

Reynolds County, on State road from Centerville to Ellington; State Project Route 21, Sec. 25;

Sta. 400 plus 40, over Sinking Creek; three 60-ft. steel truss spans; concrete floor; 20-ft. roadway; two 20-ft. reinforced concrete slab spans; 3 concrete piers; 2 reinforced concrete pile bents; J. H. Long, Div. Engr., Willow Springs, Mo.

Miller County, on State road from Jefferson City to Eldon, State Project, Route 15, Sections 56 and 57.

Sta. 119 plus 83, over Branch of Boush Creek; 16-ft. reinforced concrete slab span; 20-ft. roadway; 2 reinforced concrete abutments;

Sta. 273 plus 55; 30-ft. reinforced concrete deck girder span; 20-ft. roadway; 2 reinforced concrete abutments; R. W. Hodson, Div. Engr., Jefferson City, Mo.

Cape Girardeau County on State road from Jackson to Perry County line; State Project, Route 25, Sec. 19.

Sta. 72 plus 10, over Poor Creek; 50-ft. steel truss span; 20-ft. roadway; concrete floor; 2 reinforced concrete abutments;

Sta. 159 plus 85, over Hughes Creek; 60-ft. steel truss span; concrete floor; 20-ft. roadway; 2 reinforced concrete abutments; F. B. Newton, Div. Engr., Sikeston, Mo.

Missouri—State Highway Dept., Jefferson City, Mo., will build 7 reinforced concrete bridges. For full details see Mch. Wanted—Bridge Construction.

Mo., Butler—State Highway Dept., Jefferson City, Mo., let contract to Western Bridge Co., Harrisonville, Mo., at \$5834.90 for bridge on State road between Butler and Rich Hill; Sta. 689 plus 70, over Park Branch; 30-ft. reinforced concrete deck girder span; 2 reinforced concrete abutments; Bates County, State Aid Project No. 20,182.

Mo., Kennett—Punklin County Drainage Dist. No. 36, will build 6 bridges. For full details see Mch. Wanted—Bridge Construction.

Mo., Platte City—State Highway Dept., Jefferson City, Mo., will build steel and reinforced concrete bridge. For full details see Mch. Wanted—Bridge Construction.

Okla., Fairfax—Osage County Comms., plans following bridges:

Over Salt Fork, near Burbank.
Over Charley Creek on Burbank-Ponca City road.

Over Sycamore Creek, on Burbank-Fairfax road.

Over Bird Creek, near Neloganey.

Over Clatamore Creek near Hominy.

Okla., Jay—Delaware County Comms., plans building 2 steel bridges; over Spavinaw

and Honey Creeks; J. W. Neel, Commr. of Third District.

S. C.—Columbia—For full details see Mch. Wanted—Road and Bridge Construction.

S. C., Converse—State Highway Coman., Columbia, S. C., contemplates constructing bridge over Pacolet River at Converse, on National Highway, between Spartanburg and Cowpens; \$35,000 Federal Aid available.

S. C., Madison—Oconee County plans constructing bridge over Tugaloo River, connecting State Highway No. 17 with Georgia road, financed by both states and Federal aid.

S. C., St. George—For full details see Mch. Wanted—Road and Bridge Construction.

Tenn., Chattanooga—For full details see Road and Street Construction.

Tenn., Rutledge—Grainger County Highway Comsn., let contract to Roehl & Steel, Holston Bank Bldg., Knoxville, Tenn., to construct 7 reinforced concrete arch bridges as follows: Moody Creek, Richland Creek, Turley's Mill, Perrin's Hollow, Dry Creek, Messingill and Stony Creek; John A. Steel, Jr., Structural and Contr. Engr., Holston Bank Bldg., Knoxville.

Tex., Fort Worth.—Tarrant County will build 3 concrete bridges. For full details see Mch. Wanted—Bridge Construction.

Tex., Richmond—Fort Bend County plans constructing bridge over Brazos River on State Highway No. 3; \$194,700; C. D. Myers, County Judge, Richmond; C. H. Kendall, County Engr., Sugarland, Tex.

Tex., Sequin—Guadalupe County, S. C. McCarty, County Engr., plans building concrete bridge over Nash Creek, on State Highway No. 3; J. B. Williams, County Judge.

Va., Portsmouth—Norfolk County Comms. of Roads and Streets, Portsmouth, let contract to C. B. Cross & Co., at \$16,500, to build West Norfolk Bridge across Elizabeth River, from Port Norfolk to West Norfolk. (Lately noted.)

Va., Portsmouth—City and Norfolk Div. of Pennsylvania R. R., will build culvert near Port Norfolk School, at 3rd St. and Chataqua Ave.; 5-ft. wide; \$5000; J. P. Jervy, City Mgr.

Canning and Packing Plants.

Fla., Apalachicola—Wm. Lee Popham will develop 9000 acres in Satsuma oranges, figs, blueberries and pecans; approximate cost \$3,000,000; will open construction bids in early part of 1923. (Lately noted). See Mch. Wanted; Canning Machinery; Tractors; Building Materials, etc.)

Fla., Apalachicola—Wm. Lee Popham, let contract to David B. Maddox, for construction of oyster canning plant and raw house and ice plant and refrigeration (electric) in connection with oyster canning plant; cost of building and equipment \$150,000; open mch. bids about Jan. 1. Lately noted. (See

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Meby. Wanted—Oyster Canning Equipment, etc.)

Fla., Stuart—Wm. Mosley, Mgr., Ft. Pierce Packing House, Ft. Pierce, Fla., and others interesting in establishing packing house.

Va., Fentress—T.H. Old Canning Co., capital \$1,000,000, inceptd. by T. H. Old, A. S. Ross both of Fentress, Edw. Walbridge, Norfolk.

Va., Norfolk—Scott Terminis Corp., lately noted inceptd. with \$100,000 capital, John T. Scott, Prest.; opens bids Oct. 22 for construction of storage, canning and dehydration plant for fruits and vegetables in Newton Park; about \$750,000 to be expended.

Coal Mines and Coke Ovens.

Ky., Allock—Carrs Fork Coal Co., Lexington, Ky., J. B. Allen, Mgr., Const. Engr., Allock, has 2400 under development, daily output 1200 tons. (Supersedes recent item.)

Ky., Harlan—Harlan Straight Creek Coal Co., capital \$25,000, inceptd. by K. T. Corneliuss and J. B. Snyder, Harlan; Sameul Bennett, Lejunior, Ky.

Ky., Iverdale—Red Low Coal Co., Wheeler, Ky. (Lately noted inceptd.) organized with E. A. Rhoads, Prest.-Mgr.; will develop 646 acres coal lands, daily output 50 tons; install mchy. See Mchy. Wanted—Mining Machinery.)

Ky., Mater—Sam Bastin and Henry Potter, develop 1000 acres coal lands and construct plant on north fork of Kentucky river; estimated daily capacity 500 tons; build mining town.

Ky., Millstone—Elkhorn Jr. Coal Co. leased additional properties, increasing output from 500 to 1000 tons daily.

Mo., Warsaw—Lincoln Coal & Mining Co., 2645 Southwest Blvd. (lately noted inceptd. capital \$10,000) organized with Scott Myers, Prest.-Treas.; W. C. Tillotson, Secy.; J. J. Caldwell, Mgr.; develop 300 acres of coal land, daily output 100 to 300 tons.

Tenn., Bledsoe County—Sewanee Fuel & Iron Co., Chattanooga, Tenn. acquired 15,000 acres coal land, is expending about \$500,000 on improvements; lay railroad to tipple site.

Va., Jewell Ridge—Little Jewell Coal Co., E. V. Walter, Mgr.; will develop 100 acres coal land, daily output 200 tons; has equipment. (Lately noted inceptd., capital \$40,000.)

Va., Wytheville—Stony Fork Coal Corp., capital \$10,000, inceptd. with F. Johnston, Prest.; W. C. Stone, Secy.

W. Va., Barbour County—Brown Brothers, Uniontown, Pa. acquired 104 acre of Bear Mountain coal tract, reported to erect coal tipple, sink shaft, etc.

W. Va., Clay—Clay County Coal Co., capital \$100,000, inceptd. by H. D. Callihan and J. F. Grimet, Huntington, W. Va.; C. A. Purcell, Clay.

W. Va., Greenview—Greenview Coal Co., 314 Mount Hope, W. Va., (lately noted inceptd., capital \$15,000), organized with E. G. Watkins, Prest., Mgr. and Const. Engr.; E. McK. Hardesty, Secy.-Treas.; installing plant for development of 73 acres coal land.

W. Va., St. Albans—Fennimore Collieries Co., capital \$100,000, inceptd. by W. R. E. C. and A. C. Fennimore.

Concrete and Cement Plants.

Ala., Birmingham—Lehigh Portland Cement Co., Allentown, Pa., let contract to Dwight P. Robinson Co., Inc., 125 E. 46th St., N. Y., to construct cement mill, annual capacity 1,000,000 bbls. (Previously noted.)

Md., Brooklyn—Arundel-Shope Brick Co., Pier 2, Pratt St., Baltimore, Md. (lately noted inceptd. capital \$10,000) organized with Lawson L. Wagner, Prest.-Mgr. and Archt.; Richard A. Froehlinger, Secy.-Treas.; erect frame and corrugated iron manufacturing unit, steam rooms, boiler and storage rooms; construction by owners; install 20 shape patented machines; mfr. concrete face bricks, etc.

Tex., Gonzales—Concrete Tile, etc.—Gonzales Cement Works. A. O. Neumann, Prop., plans building 1½-story, 50x88-ft. plant and 40x50-ft. office building; mfr. fancy tiling for floors, hearths, mantels, etc.

Cotton Compresses and Gins.

Tex., Bradshaw—R. C. Malone will rebuild gin, burned at loss of \$15,000.

Drainage Systems.

Fla., Tallahassee—Everglades Drainage Dist. Board of Trustees, are expending approx. \$150,000 monthly on construction of canals in everglades drainage work; estimated cost of completed work about \$3,000,000. (Previously noted.)

Mo., Maryville—Jackson Township Drainage Dist., Nodaway County, let contract to W. A. DeLong, Des Moines, Iowa, to construct 9 mi. ditch, 500,000 cu. yds. excavation, drag line work; reclaim 4000 acres.

N. C., Bolton—Columbus County Drainage Dist. No. 2. For full details see Mchy. Wanted—Drainage.

N. C., Statesville—Upper Third Creek Drainage Dist. No. 1, Iredell County. For full details see Mchy. Wanted—Drainage.

Electric Light and Power Plants

Ark., Mountain Home—Wyatt Wolf inter-

ested in organizing company to install light and ice plant.

Ark., Searcy—City granted 50-yr. franchise to Virgil C. Pettie and W. D. Self, Prest. and V.-P. of Arkansas Power Corp. to furnish light and power from dam on Little River; first dam is being constructed by J. Livingston & Co., New York, construction of second dam will begin after completion of first one.

Ark., Smuckover—Arkansas Light & Power Co. will install power plant and system, 300 H. P. capacity equipped with two 150 H. P. gas engines directly connected to 250 H. P. generator; equipment purchased; cost \$25,000.

Fla., Ft. Pierce—C. C. Braswell, C. Leon Faber and others interested in establishing white way.

Ga., Graysville—Gray Bros. contemplate installing electric unit at cornmeal mill; will rebuild and raise dam; furnish surrounding country with electric power.

Ky., Hickman—Kentucky Light & Power Co., W. A. Moore, Mgr., 825 Marion E. Taylor Bldg., Louisville, L. B. Herrington, Prest., will construct 22 mi. transmission line from Hickman to Fulton; materials purchased; G. T. Bogard, Ch. Engr., Louisville. (Lately noted.)

Md., Baltimore—Consolidated Gas, Electric Light & Power Co., Herbert A. Wagner, Prest., Lexington Bldg., will construct 1 story fireproof sub-station at 700-24 W. Pratt St.; cost \$21,360; construction by owner.

Md., Baltimore—The Larchmont Co., let contract to Trusheim Electric Co., 3401 Moundmin Ave., for placing decorative park lamps on Park Drive and Poplar Drive, Larchmont.

Md., Chevy Chase—For full details See Land Developments.

Miss., Corinth—City let following contracts for electric light and distribution station, as follows:

Section 2, brick chimney to Alphons Custodius Chimney Const. Co., Healy Bldg., Atlanta, Ga.

Section 3, two 300 H. P. water tube boilers to Corinth Machine Co., at \$16,200.

Sections 4, 5, 6 and 7, turbo generator set, exciters and switchboard to Westinghouse Electric Manufacturing Co., at \$33,200; East Pittsburgh, Pa.

Section 10, steam pipe work to Urbauer-Atwood Heating Co., 1446 S. 2nd St., St. Louis, Mo., at \$7200.

Section 1, brick house, including foundations for mchy., estimated cost \$12,000. all bids rejected; Sections 8 and 9, bids rejected. Fuller & Beard, Consult. Engrs., Room 616 Title Guaranty Bldg., St. Louis. (Lately noted).

OPPORTUNITIES FOR NEW BUSINESS

THROUGH THE

DAILY BULLETIN

Manufacturers of Machinery and Equipment, Dealers in Railroad and Contractors' Supplies, as well as Architects, Contractors and Builders, find it very profitable to follow up the advance news furnished through our **DAILY BULLETIN EVERY BUSINESS DAY IN THE YEAR.** It is an authoritative, prompt source of information concerning every industrial and railroad undertaking of any consequence, and likewise all important building operations and municipal improvements in the whole South. The opportunity of getting in correspondence with firms that are in the market is afforded by a daily perusal of its columns.

MANUFACTURERS RECORD

BALTIMORE, MD.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Mo., Clayton—West St. Louis Water and Light Co., reported to expend \$260,000 in improvements to plant.

N. C., Saluda—City will construct white way; P. H. Bailey, Mayor.

Okla., Barnsdall—Bigheart Light & Power Co., Pawhuska, has contract for installing electric lights.

Okla., Goltry—City voted \$15,000 bonds for installing and equipping electric system. Address The Mayor.

S. C., Ehrhardt—Peoples' Utility Co., incptd., with S. W. Copeland, Prest.; Leinwand, V. P.; D. E. Fender, Secy.

Tex., Canton—City will construct light plant, votes Oct. 31 on \$16,500 bonds, Lamar Slides, City Secy.

Tex., El Paso—City will expend \$80,000 for installation of electric lights. Address The Mayor. (Lately noted.)

Tex., Sherman—Comms. Court granted H. Brodhead and associates of Whitewright, Tex., 50-yr. franchise for erecting and maintaining electric light and power line along Bells-Whitewright public road and Bells-Savoy road, for furnishing homes and towns adjacent to roads with light and power.

Tex., Yorktown—Texas Central Power Co. let contract to Summer Sollitt Co. for construction of power plant; estimated cost \$18,000. (Lately noted.)

Va., Portsmouth—City opened bids for establishing white way on various streets, Wm. A. Burckard & Co., lowest bidder.

Fertilizer Factories.

Mo., Sarcxie—Charles Shull and H. T. Oltman purchased property of Sarcxie Lime Kiln Co. will erect crushing plant for mfre. of fertilizer.

Flour, Feed and Meal Mills

Mo., Afton—J. T. Bracken, interested in organizing company with \$6000 capital to rebuild burned flour mill with 50 bbl. capacity.

Mo., Carthage—Cowgill & Hill Milling Co. will rebuild burned elevator; capacity 150,000 bu.

Foundry and Machine Plants.

Ala., Birmingham—National Cast Iron Pipe Co. reported to erect plant additions for mfre. of De Lavaud pressure pipe.

Md., Baltimore—Machinery.—Reus Bros., 150 W. Mt. Royal Ave., let contract at \$20,000 to Charles L. Stockhausen Co., Gay and Water Sts. to erect 1 story, 81.5x59-ft. brick addition to plant.

Md., Hagerstown—Jamison Cold Storage Door Co., reported to erect plant additions, including stock room and office bldg.

Okla., Okemah—Standard Machine & Tool Co., capital \$100,000, incptd. by J. R. and E. G. McCoy and J. E. Morgan, all of Barnsdall, Okla.

Okla., Tulsa—Tulsa Pipe & Supply Co., capital \$100,000, incptd. by Harry Stekoll, A. Dee and Mabel Elliott.

Gas and Oil Enterprises.

Fla., St. Petersburg—For full details see Water Works.

Ga., Chickamauga—McElmore Cove Oil Co., capital \$50,000, incptd. by J. P. Dunaway, Chickamauga, Frank P. Case, D. H. Mitchell both of Chattanooga, Tenn.; develop 10,000 acres of oil land.

Ky., Owensboro—Kentucky Public Servn. Co., will install 10-in. low pressure trunk main on various streets; cost \$22,000.

Ky., Paducah—McCracken County Oil, Gas

& Mineral Co., capital \$5000, incptd. by C. M. Black, H. L. Davis, Roscoe Day.

Ky., Somerset—Morris Petroleum Co., capital \$25,000, incptd. by Jackson Morris, Less Combs, Liberty, Ky.; Henry J. Stites, Louisville.

La., Alexandria—City will soon let contract for construction of local distribution system; Southern Carbon Co., Monroe, La., has contract for construction of 12-in. gas pipe line from Swartz to Alexandria, distance of 105 mi., supplying intermediate points with gas. (Lately noted.)

Md., Chevy Chase—For full details see Land Development.

Md., Easton—City—Wm. Milnes Maloy, Chr. Public Service Comsn. purchased gas plant; will issue bonds for improvements.

Mo., Cameron—Wilhoit Oil Co. will erect tank and warehouse; construction begun.

Mo., Jefferson City—Marland Refining Co., capital \$17,000, incptd. by E. W. Marland, W. H. McFadden, W. G. Lackel. (Lately noted.)

Mo., St. Louis—For full details See Mch. Wanted—Gas Lamps.

Mo., St. Louis—For full details see Land Developments.

Mo., Washington—Washington Oil Co., capital \$5000, incptd. by L. H. Schroeder, C. A. Krumnick, M. Conley.

Tex., Burkburnett—Burkburnett Gas Co., Clifford Moore, Prest., will make improvements to plant.

Tex., Houston—Thornel Petroleum Co., capital \$105,000, incptd. by J. E. Ellis, W. B. Thorning, W. P. Nebblitt.

Tex., Houston—Mohawk-Houston Co., capital \$20,000, incptd. by J. C. Ellis, J. R. O'Hara, W. P. Nebblitt.

Tex., Houston—Palado Oil Co., capital \$50,000 incptd. by Claude Kavanaugh, Frank H. Sheffield, H. P. Porter.

Tex., Lacoste—Lacoste Oil Co., incptd. by A. H. Tondre, L. A. Koontz, J. C. Blediger.

Tex., Mercedes—Mercedes Petroleum Co., capital \$27,000, incptd. by E. B. Witmer, B. H. Brooks, Sr.; B. A. Acker.

Tex., Mexia—Springfield Petroleum Co., capital \$120,000, incptd. by E. E. O'Byrne and K. M. O'Byrne, both of Mexia, and M. E. O'Byrne, of Springfield, Mo.

Tex., Mexia—Trinity Co., capital \$100,000, incptd. by C. F. Clay, Wm. Reed, J. A. Elkins.

Tex., Mineral Wells—Stephens Pinto Oil & Gas Co., capital \$112,000, incptd. by W. J. Wood, R. R. Norwood, G. C. Briscoe.

Tex., Oilton—Magnolia Petroleum Co., will construct tank farm, siding and loading rack and pipe line, etc.

Tex., Wichita Falls—Magnolia Petroleum Co., Dallas, reported to have acquired 180 acres in South Electra field.

Va., Roanoke—Virginia Oil Co., capital \$10,000, incptd. with S. Harris Hoge, Jr., Prest.; Lyman Spaulding, Secy.

Ice and Cold-Storage Plants.

Ark., Blytheville—E. A. Fisher interested in organizing company to establish ice plant.

Ark., Mountain Home—For full details see Electric Light and Power Plants.

Fla., Apalachicola—Wm. Lee Papham will construct electrical refrigeration and mammoth warehouse in connection with mfre. of ice. (See Mch. Wanted—Refrigerating Equipment.)

Fla., Apalachicola—For full details see Canning Plants.

Fla., Daytona—T. M. H. Zuber, reported to establish cold storage plant.

Fla., West Palm Beach—Anarectic Ice Co. let contract to Keystone Construction Co. to construct plant additions; increasing daily capacity to 75 tons; mch. all purchased.

Ky., Paducah—Paducah Ice Mfg. Co. reported to erect new ice plant.

La., Kaplan—Vermilion Ice & Cold Storage, A. Cools, Secy., contemplate establishing additional plant for mfr. of artificial slate roofing; install hydraulic compressing machine. (See Mch. Wanted—Compressing Machine (Hydraulic).)

Md., Baltimore—American Ice Co., C. Leslie Weir, Calvert Bldg., will erect 1-story, 107x59-ft. brick building on Register and Gough Sts.; approx. cost \$50,000; construction by owner.

Miss., Gulfport—Geo. Shirley and others contemplate erecting ice plant.

Mo., Blytheville—E. A. Fisher and F. C. Douglas, interested in establishing 30 ton capacity ice plant.

Mo., Boonville—City plans erecting additional ice plant. Address The Mayor.

Mo., Centrella—Schultz Brothers, Forestell, Mo. reported to establish ice plant.

Mo., Joplin—Thomas Fruit Co., will erect 5000 ton capacity ice storage plant; estimated cost \$30,000.

Mo., LaGrange—S. C. Accola, plans doubling capacity of ice storage plant.

Mo., Paris—City contemplates erection of 10 ton ice plant. Address The Mayor.

Mo., Springfield—Springfield Ice & Refrigerating Co., A. F. Johnson, Mgr., will expend \$50,000 on additions and improvements; Ophuls & Hill, Inc., Const. Engrs., 114 W. 42nd St., New York.

N. C., Mooresville—Modern Dairy Co. reported to make plant improvements.

N. C., Winston-Salem—Reynolds Lydbrook Farm Co. will install refrigeration equipment in dairy plant.

Okla., Cleveland—Cleveland Ice Co. has tentative plans for plant improvements.

Okla., Oklahoma City—New State Ice Co., Carl S. Glitsch, V. P., will expend \$275,000 on improvements, including electrically driven 60-ton raw water ice-making plant, 6000 ton ice storage and remodel present plant; Ophuls & Hill, Inc., Const. Engrs., 114 W. 42nd St., New York.

Tex., Corpus Christi—Lone Star Ice Co. has added additional dept. to plant for bottling distilled water; contemplate improvements in ice-making plant.

Tex., Eldorado—Robbins & Fletcher Co. reported to establish ice plant.

Tex., Magnolia—Alford Ice Co. will erect ice house at W. Magnolia and Frisco Railroad; approx. cost \$20,000.

Tex., Waxahachie—Waxahachie Ice Co. will construct ice storage plant.

Tex., Wharton—M. H. & C. L. Crockett, Austin, Tex., have under construction icing and packing shed equipped for shipping vegetables.

Tex., Yorktown—Yorktown Electric & Ice Co. will erect 20 ton raw water ice plant.

Tex., Yoakum—Yoakum Ice Co. increased capital to \$55,000.

Va., Charlottesville—Elliott Ice Co., capital \$50,000, incptd. with J. F. Elliott, Prest.; W. Dabney Harris, Secy.

Va., Pulaski—Hygienic Ice Co. will double plant's capacity.

Iron and Steel Plants.

La., New Orleans—Lukens Steel Co., Jos.

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Humpton, Secy.-Treas., Coatsville, Pa. will expend \$300,000 on construction of fabricating plant and equipment, industrial development consists of four units, building 75x250-ft. equipped with latest device for storing, shearing and cutting of materials; Robert M. Walcott, local Mgr.

Irrigation.

Okla., Ardmore—Robert Crittendon, will use sub-irrigation system on farm land.

Land Development.

Ark., Pine Bluff—Jefferson County Strawberry Growers, R. W. Etter, Secy., will develop 200 acres in strawberries.

Fla., Bartow—Lake Garfield Investment Co., capital \$50,000, incptd. with Guy Ridge, Prest.; A. P. Ayres, V.-P.; E. O. Friday, Secy.

Fla., Eustis—Lake County Groves Corp., lately noted incptd. with \$650,000 capital, Irving H. Chase, Prest. will develop 12,000 acres in oranges, etc., will develop about 500 acres yearly; construct roads, etc.; construction by company's forces.

Fla., Ft. Lauderdale—International Sugar Corp., Howard L. Allen, Gen. Mgr., will expend about \$1,000,000 in development of 4000-acre tract in sugar cane and construction of sugar mill and refinery nr. Ft. Lauderdale; it is planned this winter to develop 200 acres of cane, next year increase to 2000 additional acres; later will erect mill and refinery, with total capacity of 1500 tons cane daily, at full capacity sugar mill will have output of 200,000 lbs. of sugar every 24 hrs.; plan to create special drainage district to surround property with ditch 20 ft. wide, drainage and development work to cost \$100,000.

Fla., Ft. Lauderdale—Ross Clark will develop 6000 acres of land for small farms of 10 acres each to be planted in sugar cane; will intersect entire territory with canals and roadways, construct hard surfaced roads, etc.; Everglade Land & Development Co., of Miami, Geo. E. Warren, Prest., in charge of colonization.

Fla., Ft. Lauderdale—Beverly Heights Corp., lately noted incptd. with M. A. Horst, Prest., \$60,000 capital, will develop about 400 city lots; pave streets, construct sidewalks, curbs, water mains, plant palms and shrubbery, dig canal, etc.; amount to be expended about \$60,000; work by company's forces, except paving, contract for which will be let next month; H. C. Davis, Engr. in charge.

Fla., Jacksonville—Lake Osborn Syndicate, capital \$77,000 incptd. with Alex Drake, Prest.; C. L. McCoy, V.-P.; M. M. Hogan, Secy.

Fla., Jacksonville—Florida Waste Co., capital \$100,000, incptd. with M. T. Nichols, Prest.; Henry Koplin, V.-P.; J. E. Dean, Secy.

Fla., St. Petersburg—United Properties, Inc., capital \$5000, incptd. with H. C. Bare, Prest.; H. W. Holland, V. P.; Lenore R. Bare, Secy.-Treas.

Fla., St. Petersburg—For full details see Water Works.

Fla., Valrico—Valrico Highlands Citrus Corp., capital \$250,000, incptd. with W. F. Miller, Prest.; J. R. Regnas, V.-P.; D. H. Laney, Treas.

Md., Baltimore—Skadin Construction Co., 1805 N. Chapel St., capital \$40,000, incptd. by Andrew Skadin, Joseph Sanerib, Ernest Sanders.

Md., Baltimore—Chauncey Realty Co., 5 N. Gay St., capital \$150,000, incptd. by Louis Applefeld, Jacob I. Hamburger, Isidor C. Cohen.

Md., Baltimore—Harry Fahenstock, 2503 Madison Ave. and Charles E. Rleman, 14 N. Eutaw St., will develop Dumbarton for subdivision; construct concrete road, cost \$25,000.

Md., Baltimore—Federal Land Corp., 1132 S. Hanover St., capital \$500,000, incptd. by Harry G. Jones, Wilbur F. Skillman, Oscar D. Green.

Md., Chevy Chase—Minor-Cooper and Gray, Inc., 702-04 District National Bank Bldg., Washington, D. C., lately noted incptd. with \$50,000 capital, organized with M. L. Cooper, Secy.-Treas., T. P. Gray, V.-P.; A. J. Minor, Prest.; will develop 41 acres opposite Chevy Chase Country Club; construct paved streets, sidewalks, curbs, gutters, sewerage, water, gas, electric, build houses, etc.; approx. cost \$125,000; contract let for mch.

Miss., Biloxi—North Biloxi Improvement Assn., Rev. J. D. Hagaman, interested in development of Back Bay territory.

Miss., Vicksburg—Delta Land & Forestry Co., capital \$50,000, incptd. by Phillip D. Houston, Horace K. Houston, J. F. Shilling.

Mo., Kansas City—Woodland Investment Co., capital \$50,000, incptd. by W. H. Richards, W. H. Launder, Geo. Heath.

Mo., Kansas City—St. Charles Real Estate Co., capital \$50,000, incptd. by Henry C. Scherf, Martin H. Hess, Henry Graham.

Mo., Mountain Grove—Mountain Grove Oil & Development Co., capital \$10,000, incptd. by J. A. Wheeler, John Stephens, A. F. Collier.

Mo., St. Louis—Sonnemann-Barnett Realty Co., incptd. by F. J. Sonnemann, J. M. Barnett, E. W. Conneman.

Mo., St. Louis—Medaracke-Barth Real Estate & Investment Co. will develop South Kingshighway Terrace for subdivision, construct 5-ft. granitoid walks, concrete streets, sewers, water, gas, etc.

Mo., St. Louis—A. R. Schollmeyer purchased 12 acres on Gravois and Loughborough Aves.; will develop for subdivision, construct stores, dwellings, streets, sidewalks, sewers, etc.

S. C., Burton—Pleasant Farms, capital \$60,000, incptd. with J. E. Bellamy, Prest.; H. B. Macklin, V. P.; J. B. Fordham, Secy.

S. C., Columbia—American Realty Co., incptd. by C. A. Rippey, E. J. Myers, Prioleau Etchison.

S. C., Clover—Hawthorn Mills Co., purchased and will develop 16 acres for playgrounds and baseball park.

S. C., Spartanburg—City will develop 70 acres of land for park; John Nolen, City Planner, to have charge of work; will construct driveways, etc. (Lately noted.)

S. C., Wedgefield—Wedgefield Peach Growers' Assn., lately noted incptd. with \$10,000 capital, organized with W. D. Ryan, Secy. and Treas.; will develop 100 acres.

Tex., Austin—City, Walter L. Eyres, Water and Light Commrs., will improve Barton Springs for bathing beach and park, will level grounds, resurface with tarvia, build terrace with 11 ft. slope; install water system with 8 in. pipe line; erect buildings, etc.

Tex., Mission—Mission Land & Orchard Co., incptd. by T. B. White, T. W. Trigg, S. M. Duffie.

Tex., Navasota—For full details see Road and Street Construction.

Tex., San Juan—San Juan Townsite Co., capital \$50,000, incptd. by O. S. V. Ross, J. E. Butler, W. R. Montgomery.

Va., Messick—Messick Improvement Co., capital \$25,000, incptd. with Essie Watkins, Prest.; Alfred Forrest, Secy.

Va., Petersburg—Westover Park Corp. will develop land in Walnut Hill Addition, install water and sewer system, contract for installation let to E. E. McKesson, at about \$20,000.

Va., Roanoke—Lilly Land Corp., capital \$50,000, incptd. with J. H. Lilly, Prest.; H. E. DeJarnette, Secy., all of Princeton, W. Va.

W. Va., White Sulphur Springs—Ashby M. Caldwell, Davis S. Martin of Charleston, purchased holdings of Villa Park Land Co. develop for sub-division, construct streets, alleys, etc.

Lumber Manufacturing.

Ala., Wetumpka—Godard Lumber Co., J. F. Godard and E. A. Newton, Proprs. will erect 40x100-ft. building with two 40x60-ft. L's; install planing mill, total cost with equipment \$15,000; construction by owners; later will erect veneer and hardwood saw mill. (Lately noted burned at loss of \$50,000.)

Ark., Lepanto—J. W. Rogers & Co. improving plant, installing Moore dry kiln for drying cypress lath.

Tenn., Elizabethton—William B. Marsh Lumber Co. reported to install boiler, engine and auxiliary power equipment at its power house.

Tenn., Memphis—U. S. Lambert Lumber Co., capital \$50,000, incptd. with U. S. Lambert, Prest.; Earl Felger, Secy.; succeeds the Dickson & Lambert Co. will operate 7 ft. band mill for mfr. of hardwoods.

Tex., Clarksville—Steger-Turner Lumber Co. will rebuild planing mill and dry kiln. (Lately noted burned, loss \$30,000.)

Tex., San Antonio—Mellif-McAllister Lumber Co., cor. Buena Vista and Medina Sts., (lately noted incptd. capital \$125,000) organized with Gerald E. Mellif, Prest.-Mgr.; Thos. W. Roberts, Secy.; purchased established plant with equipment.

Mining.

Md., Hagerstown—Elastano Mining Co., Inc., 304 First National Bank Bldg., capital \$25,000, incptd. by Harry Newcomer, John W. Feldman and Wm. O. Hell.

Mo., Kansas City—Acme Limestone Co., capital \$300,000, incptd. by W. G. Dilts, L. J. Morgan and W. W. Young.

N. C., Lexington—Gold, etc.—Rodrain Electro-Metallurgical Co., J. L. Mittenhuler, Salisbury, N. C., in charge, will develop mineral lands at Gold Hill mine; erect 3 story plant, initial outlay approx. \$500,000.

Tenn., Columbia—Phosphate—J. Provine Greenlaw, purchased property of Ruhm Phosphate Co., consisting of phosphate grinding plant and several acres of phosphate property.

Miscellaneous Construction.

Ala., Birmingham—Ditches, etc.—City contemplates expending \$38,000 on cleaning and ditching stream, oiling suburban streams for the eradication of the dengue-carrying mosquito; E. B. Johnson, Sanitary Engr.; survey made by W. H. Hardenbergh, Health Dept.

Fla., Jacksonville—Incinerator—City Commn., will expend \$17,000 for site of proposed incinerator. (Supersedes recent item.)

Fla., St. Petersburg—Incinerator—For full details see Water Works.

Fla., Tampa—Seawall, etc.—Board of Trade Committee, Perry G. Wall, Chrmn. interested in building bayshore boulevard seawall and drainage work.

Ga., Decatur—Memorial Monument—Gutzon Borglum, Sculptor has begun the work of fashioning Stone Mountain into memorial monument to the Southern Confederacy;

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height of cliff 787 ft. high; plans include the carving into the mountain side of 1000 men with several figures more than 50 ft. in height in full relief; whose features can be recognized 2 or 3 mi. from foot of mountain; at base of mountain will be cut memorial hall, 200x60x50 ft.; estimated cost \$2,000,000 contributed by every state; first section to be completed in about 3 yrs., second section in 5 yrs. and probably entire work finished by 1930. (Previously noted.)

La., New Orleans—Port Comms. For full details see Mch. Wanted—Structural and Tank Steel.

La., New Orleans—Dikes—U. S. Engr., Custom House, let contract to T. O. Hotard, 235 Laverne Ave. to construct dikes at head of passes, Mississippi river.

La., New Orleans—Wharf, etc.—Dock Comsn., A. M. Lockett, Acting Prest. will expend \$1,500,000 on construction of 2000 ft. of modern shedded wharf on the Industrial canal; plans being prepared by dock board Engrs.; contract to be let early next year.

Miss., Louisville—Levee—Winston County Board of Supvgs. For full details see Mch. Wanted—Levee Construction.)

Mo., Kansas City—City Park Board let contract to National Construction Co. for grading and building three fish ponds in Swope Park; \$10,000.

N. C., Asheville—Swimming Pool—Asheville Country Club, will construct 120x60-ft. concrete swimming pool, 220 cu. yds. concrete, filters, sterilizers and bath house; Arnold H. Venderhof, Engr., 49 Patton Ave. (Lately noted.)

N. C., Winton—Heating Plant. For full details see Mch. Wanted—Heating Plant.

S. C., Charleston—Dredging—Col. Edgar Jadwin, U. S. Dist. Engr. authorized to dredge inland waterway between Charleston and Georgetown to insure minimum depth of four ft.; probably start work next spring.

Tenn., Memphis—Terminal—For full details see Water Works.

Tex., Galveston—Channel—Government contemplates improvement of Trinity river channel from its mouth to Liberty, Tex.; Federal Engr. recommended approval of an allotment of \$72,000 for work and \$20,000 annually for maintenance.

Va., Norfolk—Pier—City, let contract at \$680,000 to Raymond Concrete Pile Co. to construct 1200-ft. pier, 494-ft. wide, at municipal grain elevator, adding another unit to terminal development project.

Miscellaneous Enterprises.

Fla., Miami—Du-Rant Building Co., capital \$250,000, inctpd. with Mrs. Lillie L. Flannigan, Prest.-Treas.; George E. Stemler, V.-P.

Fla., Orlando—Slaughterhouse. — Orange County Chamber of Commerce interested in erecting slaughter house to serve all Central Florida.

Fla., Tampa—Construction—Hillsborough Flint Rock & Construction Co., capital \$65,000, inctpd. with B. M. Moodie, Prest.; E. W. Pagal, Secy.

Ky., Frankfort—Kentucky Hotel Co., capital \$100,000, inctpd. by Fred L. Hartwell, A. S. Griffin and Otho Fowler.

Ky., Frankfort—Sanitary Milk Plant, H. H. Moore, Propr., will rebuild burned plant.

Md., Arlington, P. O. Baltimore—Dairy—Walter B. Wooden, 4010 Belvue Ave. (lately noted to erect plant) will build 40x90-ft., 28x30-ft. and 30x80-ft., 1 and 2 story buildings, stone foundations, cement floors, metal sash windows; install 10 to 12 ton refrigerating outfit, 25 H. P. steam boiler; construction

by owner; R. C. Brockmeyer, Archt., 1665 N. Milton Ave. (See Mch. Wanted—Insulation (Refrigerator); Metal Sash Windows; Roof Covering; Refrigerating Outfit.)

Md., Baltimore—United Construction Co., Calvert Bldg., capital \$20,000, inctpd. by Silas A. Roth, H. Fred Smith and Edward V. Baker.

Md., Baltimore—Lafayette Press, 1413 W. Lafayette Ave., capital \$35,000, inctpd. by Harlan W. Morgan, Oscar D. Green and Harry G. Jones.

Md., Baltimore—Construction—United Construction Co., Calvert Bldg., capital \$20,000, inctpd. by Silas A. Roth, H. Fred Smith and Edward V. Baker.

Md., Baltimore—Harper's Restaurant, Inc., 11 N. Liberty St., Capital \$20,000, inctpd. by Thomas D., Mattie M. and Sarah Louise Harper.

Miss., Hattiesburg—Phoenix Laundry Co., G. P. Smith, Propr., plans installing \$10,000 washing machine; equipment purchased.

Miss., Jackson—Hobart Barbers Supply Co., increased capital to \$30,000.

Mo., Kansas City—Construction—George H. Collins Construction Co., capital \$12,000, inctpd. by George H. Collins, R. V. Aycock and Robert T. Stokes.

Mo., Moberly—Fire Fighting Equipment—City contemplates purchase of fire engine. Address The Mayor.

Mo., St. Louis—Engineering—R. H. Tait & Sons, capital \$20,000, inctpd. by R. H. Tait, Malcolm A. Black.

N. C., Charlotte—Yellow Taxicab Co., capital \$100,000, inctpd. by Hubert M., Estelle and D. A. Blake.

Okla., Ponca City—Co-operative Plumbing and Heating Co., capital \$10,000, inctpd. by Ed. W. Dieterle, Claire Gillert and others.

Tex., Brenham—Fire Fighting Equipment—City, A. A. Hacker, Mayor, contemplates purchasing additional fire fighting equipment.

Tex., Dallas—Egan Printing Co., capital \$75,000, inctpd. by A. L. Egan, W. I. Casey and J. H. Cassidy.

Tex., Houston—Parisian Dyers and Cleaners, capital \$10,000, inctpd. by Gilbert Ott, L. A. Layne and E. H. Richey.

Va., Alexandria—Parker Brawner Co., capital \$200,000, inctpd. with J. M. Waggaman, Prest.; V. F. Jennings, Secy.

Va., Bristol—Printing—J. H. Sears & Co., capital \$25,000, inctpd. with Joseph H. Sears, Prest.; Edward E. Bailly, Secy., all Newport, Va.

Va., Goshen—Alleghany Sanatorium, Inc., capital \$200,000, inctpd. with Duff G. Maynard, Prest.; Clifton Springs, N. Y.; Lloyd F. Hayden, Secy., New York.

Va., Norfolk—Fire Fighting Equipment.—City, Charles R. Ashburner, Mgr., reported to expend \$240,000 for fire protection for new territory to be annexed Jan. 1, including \$160,000 for fire fighting equipment and \$80,000 for buildings and stations.

Va., Potomac—Federal Storage & Freight Service, capital \$50,000, inctpd. with Robt. B. Hall, Prest.; Edward E. Loving, Secy.; both of Washington, D. C.

Va., Richmond—Fireside Amusement Corp., capital \$25,000, inctpd. with C. N. Quinn, Prest.; T. A. Williams, Secy.

Va., Richmond—Rubber, etc.—United States Sales Corp., capital \$25,000, inctpd. with R. J. Bell, Prest.; J. E. Dunford, Secy.

W. Va., Capon Springs—Amusement Park—John S. Scully, Jr., Winchester, Va. (lately noted, purchased summer resort) will remodel 36 room building and cottages, need equipment and furnishings, also install elec-

tric light plant. (See Mch. Wanted—Kitchen & Dining Room Equipment.)

W. Va., Hinton—Hinton Daily News, capital \$50,000, inctpd. by H. G. Clark, Edward

Miscellaneous Factories.

Ala., Demopolis—Mattress—Commercial Club interested in establishing mattress plant.

Ark., Gravette—Gravette Community League interested in establishment of cheese plant.

Ark., Jonesboro—Maddy Ice Cream Co. reported to install additional refrigerating equipment.

Ark., Siloam Springs—Gay-Ola Bottling Co., establish ice cream mfg. plant.

Ark., Texarkana—Texarkana Paint Co., capital \$25,000, inctpd. by B. H. Kuhl, H. H. Harrell, J. H. Harrell.

D. C., Washington—Orator Radio Corp., capital \$50,000, inctpd. by A. P. McArthur, Emmett M. Carter, R. B. Dickey.

D. C., Washington—Quality Beverage Distributing Co., inctpd. by Roy K. Amick, L. M. Jenkins, Levi H. David.

Fla., Ft. Lauderdale—Sugar Mill and Refinery—For full details see Land Development.

Fla., Jacksonville—Shoes—Children's Bootery, capital \$10,000, inctpd. with Jacob L. Jacob, Prest.; Hyam Joel, V.-P.; Samuel Sawlowsky, Secy.-Treas.

Fla., Miami—Biscayne Tent & Awning Co., capital \$10,000, inctpd. with R. A. La Pointe, Prest.; Elmer Wetzel, V.-P.; E. A. LaPointe, Secy.

Fla., Stuart—Soft Drinks, etc.—A. M. Dodge Co., capital \$25,000, inctpd. with H. W. Dodge, Prest.; C. S. Richardson, V.-P.; A. M. Dodge, Secy.-Treas.

Ga., Atlanta—Coca Cola—Thomas K. Glenn reported interested in organization of holding company with \$25,000,000 capital to retain control of Coca Cola Co.

Ky., Henderson—Roby Cigar Co., Barnesville, O., has building, will remodel for cigar plant. Address Chamber of Commerce.

Ky., Louisville—Axtion-Fisher Tobacco Co. increased capital to \$1,250,000. (Lately noted constructing plant.)

La., Lafayette—Lafayette Salt Co., changed name from Benners Salt Co., increased capital to \$500,000.

La., Monroe—Texas—Louisiana Producing & Carbon Co., R. R. Beaman, Prest. increased capital to \$350,000, will construct carbon and gasoline extraction plant; complete construction of carbon plant about Jan. 1; construction of gasoline extraction plant to begin in Jan., will be of latest mineral seal oil absorption type, with vertical absorbers and will have treating capacity of 10,000,000 cu. ft. of gas per 24 hrs., and with average output of 2000 gal. gasoline daily; construction of second unit of carbon plant will commence in March; entire plant will have daily capacity of 8000 lbs. carbon black, with average consumption of 6,000,000 cu. ft. of gas per 24 hrs.; Sid Simmons Drilling Co., Monroe, has contract for constructing 6-in. pipe line. (Lately noted.)

La., Sterlington—Imperial Oil & Gas Products Corp., will expend approx. \$150,000 in improvements to plant; construct 18 carbon burning houses, etc.

Md., Baltimore—G. H. P. Cigar Co., Inc., Phila., Pa. leased building at 2113-15-17 E. Oliver St. will establish cigar plant.

Md., Baltimore—Corkstone Products Corp., 119-23 N. Collington Ave., lately noted inctpd. with \$25,000 capital, organized with Albert Rankin, Prest. and Treas.; I. Weinberg, Secy.; will mfr. stucco and composition flooring; in-

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stall mixing machinery. Lately noted. (See Mch'y. Wanted—Sand and Stone Chips.)

Md., Baltimore—E. & D. Medicine Co., 815 Equitable Bldg., capital \$10,000, inceptd. by Chas. F. Erhardt, Hans Dickel.

Md., Baltimore—Varnishes, etc.—Peerless Products Co., First St., Mt. Washington, Baltimore, capital \$100,000, inceptd. by Floyd T. Macgill, Chas. D. Harris, Norman R. Eckard.

Md., Baltimore—Marlboro Shirt Co., N. E. Cor. Lombard and Paca St., capital \$200,000, inceptd. by Solomon Rosenbloom, Isidore Rosenbloom, Solomon Silverman.

Md., Baltimore—Tel-U-Kod Co., 509 Title Bldg., capital \$15,000, inceptd. by Wm. B. Matthews, Geo. H. Gaeng, Edw. B. Duvall; to mfr. telegraphic and radio apparatus.

Md., Crisfield—Brooms—Horsey-Bassett Co., inceptd. by Melvin Horsey, Harold R. Bassett, Edw. H. Brenning.

Miss., Oxford—Madison County Creamery Co. will construct creamery; Address Chamber of Commerce.

Mo., Bonne Terre—Shirts—Ely-Walker Mfg. Co., St. Louis, contemplates erecting shirt mfg. plant.

Mo., Carthage—Mountain Grove Creamery Co., Mountain Grove, will install additional equipment.

Mo., Charleston—Shoes—Business Men's League interested in establishment of shoe plant.

Mo., Jefferson City—W. A. Edgar, T. H. Edgar, W. O. Brimer and others interested in organizing company with \$10,000 capital to establish overall plant.

Mo., Joplin—Junge Baking Co. will construct addition to plant; cost \$25,000.

Mo., Kansas City—Kansas City Rawhide Co., capital \$7,000, inceptd. by John Gyuka, Carl Hansing, Harry Hansing.

Mo., Kansas City—Paints, etc.—John W. Masury & Son, capital \$50,000, inceptd. by John W. Masury, Charles O. Wolcott, Thos. B. Masury.

Mo., Mountain Grove—Mountain Grove Creamery Ice & Electric Co. will rebuild plant burned at loss of \$200,000.

Mo., St. Louis—Shoes—Charles A. Eaton Co., inceptd. by Charles A. Eaton, Edgar B. Davis, J. Howard Field.

Mo., St. Louis—Clothing—Kurlander & Wasmann Co., capital \$25,000, inceptd. by Sol Kurlander, Wm. Wasmann.

Mo., St. Louis—Flavoring Extracts—Cherry Blossoms Mfg. Co., capital \$29,000, inceptd. by Wm. Sedgwick, T. R. Sedgwick, R. D. Guessford.

Mo., St. Louis—Sugar Creek Creamery Co., capital \$57,000, inceptd. by H. C. Horneman, G. C. Mahle, J. L. Benjamin.

Mo., St. Louis—Lund-Williams Shoe Co., capital \$77,500, inceptd. by T. L. Croteau, S. E. Dill, C. H. Blaske.

Mo., St. Louis—Arctic Ice Cream Co., capital \$75,000, inceptd. by Geo. E. Gillen, Wm. J. Crowe, Jacob Beck.

N. C., Durham—Durham Mattress Co., Ben Brogden, Propr. will rebuild plant burned at loss of \$18,000.

N. C., Hertford—Johnson & Stokes purchased plant of Eastern Peanut Co.

Okla., Muskogee—Oklahoma Fabric and Rubber Co., capital \$2,500,000, inceptd. by A. C. Leathers, Gen. Mgr. of Allen Tire & Rubber Co., Allentown, Pa., and others, interested in establishing cotton fabric and rubber plant; have building, will expend about \$1,500,000 in improvements and equipment. Address Chamber of Commerce.

S. C., Charleston—Carolina Coffee Co., capi-

tal \$50,000, inceptd. with C. C. Thomas, Prest.; J. E. Timberlake, V.-P.; L. B. Williams, Secy.

S. C., Florence—Florence Bedding Co. has building, will install bedding plant equipment.

S. C., Sumter—Chamber of Commerce interested in establishing ice cream factory.

Tenn., Greeneville—Tennessee Farm Products Co., W. W. Brown, Mgr., will construct pork packing plant.

Tenn., Memphis—Myers Paper Co., A. Myers, increased capital to \$50,000.

Tenn., Memphis—Memphis Folding Box Co., capital \$50,000, inceptd. by M. Plough, P. J. Oehm, J. H. Dunn.

Tenn., Memphis—The Whistle Co. of America, headquarters New York City, N. L. Moore, New York, Supv. will establish plant at 22 Talbot Ave. for mfr. syrup for soft drink; cost \$25,000; J. A. Parrish, Chattanooga, Local Mgr.

Tex., San Antonio—Creo Chemical Co., inceptd. by G. M. Galloway, Wm. Morgan, Russell Myrick.

Tenn., Union City—City, Mayor Woosley, interested in establishing shoe factory.

Tex., Celburne—Creamery—Geo. W. Curtis, Stephenville, interested in establishing creamery.

Tex., Houston—Detroit Graphite Co., capital \$5,000, inceptd. by L. R. Wyles, O. N. Edgar, A. D. Dyess, mfr. graphite, paints and varnishes.

Tex., Houston—Rex Chemical Co., capital \$8,000, inceptd. by W. D. Plunkett, L. J. Jones, W. H. Schoppmeyer.

Tex., Weslaco—Valley Creamery Co. E. L. Lassater, Falfurrias, will construct \$25,000 plant, capacity of 25,000 lbs. butter; will also establish model dairy.

Va., Hopewell—Hudson Medical Co., reorganized with \$25,000 capital, H. F. Minter, Prest.; W. E. Armstrong, V.-P.; has building on Cawson St., will install mfg. plant.

Va., Norfolk—Virginia Sweets, capital \$50,000, inceptd. with M. Liebman, Prest.; J. W. Jacobson, Secy.

Va., Norfolk—Liquid Muffler Corp., capital \$50,000, inceptd. with M. A. Brandt, Prest.; G. R. Sheppard, Secy.; to mfr. mufflers for combustion motors.

Va., Richmond—European-American Tobacco Co., Henderson, N. C., has building at Fifteenth and Franklin Sts. for plant.

Va., Richmond—Peanut Crisp Corp., capital \$25,000, inceptd. with Aaron Jacobs, Prest.; Keeve C. Steiner, Secy.

Va., Richmond—Baking Powder—E. C. Laird Corp., capital \$600,000, inceptd. with E. C. Laird, Prest.; J. S. Overby.

Va., Roanoke—Bakery—Roanoke Sunlight Bakery, W. W. Huff, Prest. increased capital to \$150,000.

Va., Suffolk—Confections—Central Distributing Co., capital \$25,000, inceptd. with J. B. Stutson, Prest.; S. E. Stutson, Secy.

Va., Richmond—Fibre Board Container Co., D. J. and L. N. Donati, let general contract to Jas Fox & Sons, E. Franklin St., for rebuilding plant burned at loss of \$100,000; brick; 3 story; slag roof; cost without equipment, \$20,000; Edgar M. Andrews Co., Contr. for power equipment; Johnson Longworth Co., contractor for heating and power plant and plumbing; will install four 1000 lb. enclosed automatic fire doors.

W. Va., Buckhannon—Cutlip-Mossman Drug Co., capital \$20,000, inceptd. by O. C. Cutlip, J. N. White, R. W. Mossman.

W. Va., Grafton—Imperial Ice Cream Co., having plans prepared for erection of plant.

W. Va., Huntington—Nightsack Mfg. Co.,

capital \$50,000, inceptd. by E. J. King, R. P. Aleshire, S. G. Risen.

Motor Cars, Garages, Tires, Etc.

Ala., Montgomery—Filling Station—Woco Pep Co., H. H. Garner, Mgr. has under construction filling station, installing all modern equipment.

D. C., Washington—Garage—Harry M. Crandall purchased 150x225-ft. site on H street, will probably erect garage, etc.

Fla., Ft. Pierce—St. Lucie County, will erect 60x120-ft., 2 story garage, concrete block foundation, macadam floors, 3 ply rubberoid roofing, bids until Nov. 7; install lighting and plumbing, to be let at separate bidding. Address Clerk of Court.

Fla., Ponce De Leon—Ponce De Leon Motor Co., capital \$10,000, inceptd. with Z. D. Adair, Prest.; H. F. Adair, Secy.-Treas.

Ky., Louisville—Monroe Motor Co., Indianapolis, Ind., reported to establish plant.

Md., Baltimore—Stutz Sales Co., 126 W. Mount Royal Ave. and McMechen St. acquired additional building for service station, sales room, etc.

Md., Baltimore—Automobile Accessories—Dimit Co., Mt. Royal Ave. and McMechen Sts., capital \$50,000, inceptd. by Louis Fox, David P. Milliman and Walter S. Hamburger.

Mo., Kansas City—Automobile Accessories—Reed—Keyhole Fastner Co., capital \$25,000, inceptd. by T. J. Reed, M. N. DeFoe and S. J. Tremonte.

Mo., Kirksville—Auto Sales Co. will construct 3 pump gasoline filling stations cor. Elson and McPherson Sts.

Mo., St. Charles—Towey Motor Co., capital \$75,000, inceptd. by W. J., George L. and Wm. H. Towey.

Mo., Springfield—Standard Oil Co. let contract to John M. Olson, for filling station at 413 Commercial St.

N. C., Asheville—Franklin Motor Co., J. E. Brookshire, Mgr. reported to erect \$35,000 building; purchased site on Market St.

Okla., Tulsa—Garage—Norval & Dial will occupy 2 story garage at 10th and Boston Sts.; approx. cost \$50,000; erected by W. C. Elliott; G. D. Morrow & Son, Contr.

Tenn., Chattanooga—Service Station—E. C. Fretz purchased 25x200 ft. site on N. Gay St., will probably erect service station.

Tenn., Memphis—Chambers Motor Co., will occupy 2 story, 70x140-ft. building, brick, wood pilasters and plate glass construction; approx. cost \$40,000; to be erected by Henry Loeb; T. J. Bobbitt, Contr.; Mahan & Broadwell, Architects.

Tex., Breckenridge—Bennett Motor Co. will occupy \$22,000 garage and filling station; B. S. Walker let contract for construction.

Tex., Dallas—Safety Tire Repair Co. will occupy 2 story brick and reinforced concrete building on Young and Evergreen Sts.; approx. cost \$15,000; Childs-Lasell Construction Co., Archt. and Contrs.; S. D. Forman, Owner.

Tex., San Antonio—Filling Station—Robert Morgan will erect \$8,000 drive-in filling station at Ave. C and 7th St.

Tex., San Antonio—Filling Station.—James M. Bibb will erect drive-in filling station at Myrtle and San Pedro Sts.

W. Va., Wheeling—Delaney-Miller Automobile Co., capital \$25,000, inceptd. by Harry A. Miller, Luther C. Delaney and Adolph M. Martin.

Railway Shops, Terminals, Round-houses, Etc.

Md., Hagerstown—Pennsylvania Railroad

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Co. let contract to John T. Pettyjohn, Lynchburg, Va. at \$50,000 to build super structure of five stall engine house, crew restroom and oil house; W. K. Martin, Engr. of Construction, Harrisburg, Pa. (Lately noted.)

Va., Graham—Norfolk & Western Ry., J. E. Crawford, Chief Engr., Roanoke, Va. let contract to Harry Waugh for concrete work of new electric pumping station, located west of Bluestone river; railroad forces to build house and install pumps.

Va., Richmond—Richmond, Fredericksburg & Potomac R. R. Co., Eppa Hunton, Jr., Prest., acquired 33 acres tract adjoining property near Acca, will extend shop facilities.

Road and Street Construction.

Alabama—State Highway Comsn., Montgomery, Ala., will build 2 roads. For full details see Mch. Wanted—Road Construction.

Ala., Tuscaloosa—State Highway Dept., Montgomery, Ala., received bids to surface 9 mi. road from Tuscaloosa to Jefferson County line; 14,950 cu. yds. gravel; Tuscaloosa County, Federal Aid Project No. 29; low bidder, Thompson & Donahoe, Tuscaloosa, at \$13,032.50; J. H. Mayer, Div. Engr., Birmingham. (Lately noted.)

D. C., Washington—Dist. Commrs. For full details see Mch. Wanted—Paving.

Fla., Bushnell—Sumter County. For full details see Mch. Wanted—Road Construction.

Fla., Dade City—Pasco County let contract to Finley Method Co., Jacksonville, Fla., at \$600,000 for 35 mi. hard surfaced and 60 mi. sand clay roads in Highlands Dist.

County will build road from Dade City to western end of County; vote Nov. 6 on \$500,000 bonds. Address County Commrs.

Fla., Ft. Lauderdale—For full details see Land Development.

Fla., Inverness—Citrus County plans about 75 mi. paved roads; E. V. Camp and Associates, Engrs., Moreland & DeKalb Aves., Atlanta, Ga., preparing plans; will vote on bonds soon. Address County Commrs.

Fla., Jacksonville—Duval County Commrs. plans improving following:

10.38 mi. road from end of present permanent highway on King's road to County line, through Dinamore.

12.83 mi. road from end of present permanent highway to Nassau River, toward Yulee.

8.25 mi. road from city limits to County line through Ortega.

20.02 mi. road from South Jacksonville city limits to County line, through Hollywood, connecting with St. Augustine road through Bayard.

8 mi. road from Baldwin to County line, through Maxville.

Two one-way roads on Beach road, utilizing present Beach road for one and South Jacksonville to Pottsburg Creek right-of-way for other.

15 mi. hard surface road from Neptune to Pablo Beach and from Neptune to Atlantic Beach; C. S. Coe, County, Engr.

Fla., Lake City—State Highway Dept., Tallahassee, Fla., received bids for 11.6 mi. State road No. 1, between Lake City and Welborn, Columbia and Suwannee Counties; low bidders; Wm. P. McDonald Construction Co., Orlando, Fla., at \$308,888.60, for sheet asphalt; J. P. Morgan Paving Co., Jacksonville, at \$292,083.61, for bituminous macadam. (Lately noted.)

Fla., Milton—For full details see Bridges, Culverts, Viaducts.

Fla., Otter Creek—Levy County, Board of Bond Trustees, Special Road and Bridge Dist.

No. 3. For full details see Mch. Wanted—Road and Bridge Construction.

Fla., St. Petersburg—For full details see Water Works.

Fla., Tampa—Hillsborough County Commrs. For full details see Mch. Wanted—Road Construction; Road Building Materials.

Fla., Tampa—Hillsborough County plans building road connecting Nebraska Ave., with State Road No. 5, north of Hillsborough River, via Sulphur Springs. Address County Commrs.

Fla., Tavares—Lake County Commrs. For full details see Mch. Wanted—Road Construction.

Fla., Titusville—Brevard County Commrs., E. C. Johnson, Chrmn., received bids for following on State Road No. 4:

7.25 mi. road between Sharpes and Titusville; low bidders: Maule Paving Co., Ojus, Fla., at \$243,637.06 for bituminous macadam; Wm. P. McDonald Construction Co., Orlando, at \$246,280.51 for sheet asphalt.

7.01 mi. road between Bonaventure and Eau Gallie; low bidders: Maule Paving Co., Ojus, Fla., at \$239,307.23, for bituminous macadam; Wm. P. McDonald Construction Co., Orlando, at \$243,263.10, for sheet asphalt. (Lately noted.)

Fla., West Palm Beach—Palm Beach County Commrs. For full details see Mch. Wanted—Road Construction.

Fla., Zephyrhills—City will improve street paving; receive bids in Dec.; E. V. Camp and Associates, Engrs., Moreland and DeKalb Aves., Atlanta, Ga.

Georgia—State Highway Dept., Atlanta, Ga., let contracts for following:

8.738 mi. road on Atlanta-Newnan Highway, from Fairburn to Campbell-Coweta County line; 92,470 sq. yds. 6-in. by 18-ft. reinforced concrete pavement; Federal Aid Project No. 174, Sec. C and D; to Davis Construction Co., Macon, Ga., at \$230,000. (Lately noted.)

9 mi. road on North Carolina line to Blairsville Highway, from Blue Ridge to Blairsville; grade and gravel surface; Union County, Federal Aid Project No. 290; to M. H. Gardiner, Columbus, Ga., at \$100,000.

Ga., Forsyth—Monroe County Commrs. plans following:

Building permanent highway between Juliette and Culloden.

Highway between Juliette and Bidd County line, about 2 mi. from Holton.

Kentucky—State Highway Comsn., Frankfort, Ky., plans following:

5 mi. road on Pineville-Middlesboro road from corporate limits of Pineville to Waslota Bridge, across Cumberland River; Bell County State Project No. 5; rock asphalt or macadam.

6 mi. road from Lynch to Virginia State line, on top of Black Mountain; Harlan County, State Project No. 56; grade and drain; bids opened Nov. 9.

Ky., Frankfort—D. D. Smith, Mayor, contemplates laying about 2 mi. reinforced concrete streets; bids opened in near future; Silas Wilson, City Engr.

Ky., Pikeville—City. For full details see Mch. Wanted—Paving.

Ky., Pineville—Bell County Commrs., Henry Broughton, Clk., will improve roads; vote Nov. 7 on \$400,000 bonds.

La., Jennings—City will pave and gravel certain streets; voted \$135,000 bonds. Address The Mayor.

La., Leesville—Town let contract to Watson & Meziel, Bossier City, La., at \$10,000 to lay cement sidewalks. Address the Mayor.

La., Ruston—Louisiana State Highway Comsn., Baton Rouge, La., plans graveling 14.5

mi. Dixie Highway from Ruston west; Lincoln Parish; bids opened Nov. 7.

Md., Baltimore—City, Paving Comsn., R. Keith Compton, Chrmn., 214 E. Lexington St., will pave following: Southern Ave., and Halcyon Park road from Elols to Edna Ave.; Clarendon Ave. from Kathland to 185 ft. north; Merowent Ave. from Clarendon Ave. to Hillsdale road; Ethland Ave. from Clarendon to 270 ft. north; Blythewood road from Charles St. to Wyndhurst Ave.

Md., Baltimore—City, Dept. of Public Improvements plans widening Hilton St. to 80 ft. between Garrison and Sequola Aves.

Md., Baltimore—For full details see Land Developments.

Md., Brunswick—For full details see Sewer Construction.

Md., Chevy Chase—For full details see Land Developments.

Miss., Hazelhurst—Copiah County, Fifth Supvrs. Dist., will complete links connecting roads already built; votes Nov. 4 on \$25,000 bonds.

Miss., Laurel—City Commrs.. For full details see Mch. Wanted—Paving and Sewer Construction.

Miss., Pascagoula—Jackson County Board of Supvrs. plans building 8 mi. hard-surfaced road from Moss Point to Alabama State line, forming part of County's link of Old Spanish Trail; bids opened Nov. 21.

Miss., Vicksburg—J. J. Hayes—Mayor plans expending \$130,000 for 40,000 sq. yds. street paving; F. M. Garvey, City Engr. (Lately noted.)

Miss., Vicksburg—J. J. Hayes, Mayor, let contract to Hannibal Jones to grade and fill Central Ave., from Washington to Thomas Sts. (Lately noted.)

Miss., Yazoo City—Yazoo County, Board of Supvrs., let contracts to Williams & Lobby Engineering Service, Inc., Yazoo City at \$140,941.50 to surface 3.9 mi. road between Yazoo City and Anchor Store on Silver Creek, connecting Yazoo and Humphreys Counties; also build 3 concrete bridges; H. C. Dieter, State Highway Engr. (Lately noted.)

Missouri—State Highway Dept., Jefferson City, Mo., let contracts for following:

Vernon County, 4.943 mi. State road from Nevada to El Dorado Springs; State Project, Route 26, Sec. 6; to Moss, Nevada, at \$14,430.

Lawrence County, 1.687 mi. State road between Monett and Springfield; State Project, Route 16, Sec. 19; to Baker & Koontz, Carthage, at \$47,450. (Lately noted.)

Plans grading and constructing drainage structures on following:

Douglas County, 3.33 mi. State road from Wright County line to Ozark County line; State Project, Route 5, Sec. 94.

Douglas County, 2.01 mi. State road from Wright County line to Ozark County line; State Project, Route 5, Sec. 93; J. H. Long, Div. Engr., Willow Springs, Mo.

Miller County, 4.991 mi. State road from Jefferson City to Eldon; State Project, Route 15, Sec. 56.

Miller County, 3.078 mi. State road from Jefferson City to Eldon; State Project, Route 15, Sec. 57; R. W. Hodson, Div. Engr., Jefferson City.

Barry County, 4.914 mi. State road from Monett to Eureka Springs; State Project, Route 37, Sec. 7, 16-ft. gravel pavement.

Barry County, 3.240 mi. State road from Monett to Eureka Springs; State Project, Route 37, Sec. 10; 16-ft. gravel pavement; Ray Dunlap, Div. Engr., Frisco Bldg., Joplin, Mo.

Moniteau County, 5 mi. State road on Capitol Highway; State Project, Route 12, Sec. 30; one course gravel surfacing.

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Moniteau County, 2,322 mi. State road on Capitol Highway; State Project, Route 12, Sec. 29; R. W. Hodson, Div. Engr., Jefferson City.

Ozark County, 5 mi. State road from Douglas County line to Howell County line; State Project, Route 5, Sec. 95.

Ozark County, 4,375 mi. State road from Douglas County line to Howell County line; State Project, Route 5, Sec. 96; J. H. Long, Div. Engr., Willow Springs, Mo.

Cape Girardeau County, 2,585 mi. State road on Kings Highway, from Jackson to Perry County line; State Project, Route 25, Sec. 19; Frank B. Newton, Div. Engr., Sikeston, Mo.

Mississippi County, 2,061 mi. State road from Cairo to Poplar Bluff; State Project, Route 16, Sec. 94; concrete and gravel surfacing; Frank B. Newton, Div. Engr., Sikeston, Mo.

Sullivan County, 5 mi. State road, from Milan to Green City; State Project, Route 6, Sec. 34; C. P. Owens, Div. Engr., Howe Bldg., Macon, Mo.

Lafayette County, 2,886 mi. State road on Sante Fe Trail; concrete pavement; State Project, Route 20, Sec. 10; A. C. Lingley, Div. Engr., Reliance Bldg., Kansas City, Mo.

Dallas County, 4,896 mi. State road from Bollivar to Buffalo; gravel surfacing; State Project, Route 15, Sec. 80; H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo.

Marion County, 4,061 mi. State road from Vienna to Osage County line; State Project, Route 7, Sec. 53; one course gravel surfacing; R. W. Hodson, Div. Engr., Jefferson City.

Perry County, 1,403 mi. State road, re locating McBride Hill; State Project, Route 51, Sec. 3; gravel surfacing; S. M. Rudder, Div. Engr., Bristol Bldg., Webster Grove, Mo.

Reynolds County, 4,866 mi. State road from Centerville to Ellington; State Project, Route 21, Sec. 25; J. H. Long, Div. Engr., Willow Springs, Mo.

Missouri—State Highway Dept., Jefferson City, Mo., plans following:

Montgomery County, 4,062 mi. State road from McKittrick S.R.D.; gravel pavement; Federal Aid Project No. 141; R. W. Hodson, Div. Engr., Jefferson City Mo.

Missouri—State Highway Dept., Jefferson City, Mo., will build 4 roads; For full details see Mch. Wanted—Road Construction.

Missouri—State Highway Dept., Jefferson City, Mo., plans following:

Christian County, 1,773 mi. State road from Billings northeastward; inverted penetration bituminous surface course; State Aid Project No. 20,207; H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo.

Mississippi County, 10,25 mi. State road from Air Line Special Road Dist.; 7-ft. gravel and 9-ft. concrete pavements; Federal Aid Project No. 198A; Frank B. Newton, Div. Engr., Sikeston, Mo.

Let contract to M. B. Gilloz, Monett, Mo., at \$31,637.24 for 10.378 mi. State road north and south of Dallas; grade and construct drainage structures on all.

Mo., Butler—State Highway Dept., Jefferson City, Mo., let contract to Western Bridge Construction Co., Harrisonville, Mo., at \$9,271.90, for 2,463 mi. State road between Butler and Rich Hill; Bates County, State Aid Project, No. 20,182; grade, construct drainage structures, etc. (Lately noted.)

Mo., Fulton—State Highway Dept., Jefferson City, Mo. For full details see Mch. Wanted—Road Construction.

Mo., Jefferson City—City let contract to Joseph Pope, Jefferson City, at \$3717.35 to build Jefferson St. from Dunklin to Ashely. Address The Mayor.

Mo., Kansas City—City, Board of Public

Works, let contracts for following street improvements; sheet asphalt pavement on Lexington Ave.; plain concrete pavement on 14th St.; 58th St. terrace; Lee, 16th, 10th, 68th, etc.

Mo., Kennett—State Highway Dept., Jefferson City, Mo., let contract to J. W. Carmean, W. P. Robertson and B. O. Bennett at \$149,942.73, for 6.56 mi. State road south from Kennett toward Senath; concrete. (Lately noted.)

Mo., Lamar—State Highway Dept., Jefferson City, Mo. For full details see Mch. Wanted—Road Construction.

Mo., Marshall—City will let contract soon to grading, curbing and gutter East Arrow St. Address The Mayor.

Mo., Ozark—State Highway Dept., Jefferson City, Mo. For full details see Mch. Wanted—Road Construction.

Mo., Poplar Bluff—City plans paving sections of Cynthia, Oak, Maude and Lester Sts. Address The Mayor.

Mo., St. Charles—State Highway Dept. Jefferson City, Mo., let contract to Moreno-Burkham Co., St. Louis, Mo., at \$670,000 for following sections of road in St. Charles County:

3.166 mi. State road from Warrensburg to St. Charles; State Project, Route 2, Sec. 66.

2.637 mi. State road from Warrenton to St. Charles; State Project, Route 2, Sec. 67.

4.929 mi. State road from Warrenton to St. Charles; State Project, Route 2, Sec. 70.

3.74 mi. State road from Warrenton to St. Charles; State Project, Route 2, Sec. 72.

3.783 mi. State road from Warrenton to St. Charles; State Project, Route 2, Sec. 73 (Lately noted.)

Mo., St. Louis—For full details see Land Developments.

N. C., Burlington—City. For full details see Mch. Wanted—Paving.

N. C., Durham—City. For full details see Mch. Wanted—Paving.

N. C., Gastonia—F. G. Fry, City Clk., plans expending \$400,000 to improve streets; Wm. Platt, Engr., Durham, N. C.

N. C., Hillsboro—T. M. Arrasmith, Mayor will pave 1 mi. streets; concrete with sheet asphalt finish; voted \$60,000 bonds. (Lately noted.)

N. C., Mount Mitchell—Mount Mitchell Development Co., F. A. Perley, increased capital from \$100,000 to \$200,000.

N. C., Shelby—City plans expending \$125,000 for additional street and sidewalk improvement; contracts let soon. Address The Mayor.

N. C., Wadesboro—State Highway Dept., Raleigh, N. C., plans building hard surfaced road between Wadesboro and Polkton.

Okla., Duncan—Stephens County will build iron-surfaced road east and west across County; voted \$800,000 bonds. Address County Commrs. (Lately noted.)

Okla., Jay—Delaware County Commrs. let contract to Stewart & Thornberry, Jay, at \$11,000 for 6 mi. road from near Oaks to Leach:

Plans improving 3 other roads; Jay-Kansas; Leach-Kansas-Siloam, and Kansas-Row-Gentry; J. W. Neel, Commr. of 3rd Dist.

Okla., Marietta—City. For full details see Mch. Wanted—Paving.

Okla., Tulsa—H. E. Newblock, Mayor, let contracts to Standard Paving Co., for following:

Widen Boulder St. from 6th to 11th Sts., from 36 to 56 ft., at \$22,347.95.

Widen Boston Ave. from 5th to 13th Sts., at \$40,000.

To Comstock-Smedley Co. for paying 13th Place from Utica to Lewis Sts., at \$29,911.90.

S. C., Charleston—Charleston County Sanitary & Drainage Comsn., 39 Broad St., let contract to Simons-Mayrant Co., Charleston, at \$283,532.22 for 9.55 mi. concrete highway from St. Johns Island turn-off to Atlantic Coast Line crossing, beyond 21-mi. post; St. Andrew Parish. (Lately noted.)

S. C., Charleston—Seaboard Air Line Ry. Co., W. D. Faucette, Chief Engr., Norfolk, Va., reported to establish shops.

S. C., Columbia—Richland County Permanent Roads Comsn. For full details see Mch. Wanted—Road and Bridge Construction.

S. C., Greenville—Greenville County contemplates building 1 to 2 mi. concrete road from city limits towards Gantt Station, by Greene Ave. over Bankhead Highway, through Duncan Mills. Address County Commrs.

S. C., St. George—Dorchester County Highway Comsn. For full details see Mch., Road and Bridge Construction.

S. C., Spartanburg—State Highway Coman., Columbia, S. C., contemplates building 2 mi. hard surface road from Arkwright; approximate cost \$70,000.

Tennessee—State Highway Dept., Nashville, Tenn., will build 2 roads. For full details see Mch. Wanted—Road Construction.

Tenn., Bristol—City Commrs. plans establishing new improvement district No. 24, including section of W. State St. and extending from 18th St. to forks of road beyond city limits.

Tenn., Chattanooga—Hamilton County, Sam Conner, County Judge, plans laying concrete on Dayton pike from Stringer's ridge tunnel to Valdeau; also constructing 60 ft. concrete viaduct over tracks of Chattanooga Traction Co.'s Red Bank car line, north of tunnel.

Tenn., Memphis—For full details see Water Works.

To A. E. Firmin, Box 633, Colgate, Okla., for bridges; John B. Nabers, County Engr. Lately noted. See Mch. Wanted—Scrapers (Wheel.)

Tex., Austin—State Highway No. 20. For full details see Mch. Wanted—Road Construction.

Tex., Bastrop—Bastrop County plans grading and constructing drainage structures on 6.25 mi. State Highway No. 3-A, from Half Way Creek to Red Gulley; \$20,000; J. B. Price, County Judge; R. E. Schiller, County Engr.

Tex., Brownsville—Cameron County, L. O'Bryan, County Auditor, let contract to E. P. McElwath, Corsicana, Tex., at \$681,206.90 for paving following roads:

10.48 mi. concrete road on State Highway No. 12, between Balalack Spur and Barreda.

10.32 mi. concrete road on State Highway No. 12, between Harlinger and Hidalgo County line. (Lately noted.)

Tex., Brownwood—Brown County Commrs. Court will build roads; plans voting Nov. 18 on \$1,185,000 bonds. Address Judge Lee.

Tex., Canton—Van Zandt County Court. For full details see Mch. Wanted—Road Construction.

Tex., Dallas—City Commrs., let contract to Central Bitulithic Co., Preatorian Bldg., Dallas, at \$77,053.84 to pave Junius St. from College St. to Fitzhugh Ave.

Tex., Dallas—S. R. Aldredge, Mayor, plans paving Ross Ave. from Market to Jefferson St.; bitulithic; \$5,125.20; Geo. D. Fairtrace, City, Engr.

Tex., Floresville—Wilson County Commrs. Court, J. E. Canfield, County Judge, plans

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building State Highway No. 9, through County; contemplates voting on bonds.

Tex., Galveston—Galveston County plans improving roads and building permanent road to Harris County line; contemplates issuing \$2,000,000 bonds. Address County Comms.

Tex., Houston—O. F. Holcombe, Mayor, plans building Boulevard connecting Hyde Park section with Washington Ave.

Tex., Houston—Harris County plans expending about \$850,000 for 18-ft. concrete road on Galveston road.

Also plans paving Main St. road from Bellaire to Fort Bend County line; concrete pavement; \$470,000; Chester H. Bryan, County Judge; Howe & Wise, County Engrs., 211 First National Bank Bldg., Houston.

Tex., Houston—Harris County, Chester H. Bryan, County Judge, plans constructing 12 mi. of 18-ft. concrete road on Washington County road between Eureka and Cypress; estimated cost \$540,000; Howe & Wise, Engrs., 211 First National Bank Bldg.

Tex., Johnson City—Blanco County let contract to Ruby and Co., Buda, Tex., and Evans Bros., Austin, at \$65,000 for following:

2.83 mi. road east of Johnson City; Federal Aid Project No. 251-A.

5.99 mi. road west of Johnson City; Federal Aid Project No. 251-C; grade, build bridges, etc.; M. W. Schofield, County Engr. (Lately noted.)

Tex., Kaufman—Kaufman County let contracts for following:

Grade 7.25 mi. Hiram road; 70,000 cu. yds. roadway; to LaRue Jones, Jacksonville, Tex., at \$8337.50.

Grade 4.2 mi. Greenville road; Buchanan & White, Temple, Tex., at \$4351.82; W. P. Williams, County Judge; L. M. Ferlet, Engr.

Tex., Liberty—Liberty County, Sam H. Cain, Judge will construct 36 mi. of 18-ft. concrete paved road on State Highway No. 36, Houston-Beaumont Road from Harris County line to Jefferson County line; State and Federal aid including county bond issue totals \$300,000; W. C. Young, County Engr.

Tex., Lufkin—Angelina County plans building 13.54 mi. 16-ft. gravel road between Huntington and Zavalla; \$181,500; John Robertson, County Judge; G. R. Abney, County Engr. receives bids soon.

Texas—Matagorda County Comms. Court will improve roads; vote on bonds as follows:

Bay City will vote Nov. 25 on \$2,000,000 bond. (Lately noted.)

Matagorda, Gulf and Wadsworth, Nov. 18, on \$110,000.

Territory covered by Wadsworth and Hawkins ranches, Nov. 27, on \$5000.

Tex., Meridian—Bosque County plans surfacing with gravel unimproved section of Meridian Highway in County; \$20,000; W. A. York, County Judge, Meridian; C. H. Van Eman, County Engr., Glen Rose, Tex.; bids in about 30 days.

Tex., Mineral Wells—L. Smith, Mayor, let contract to Tibbetts & Ashburn, to pave Parker St.

Tex., Navasota—Town plans paving streets and developing parks; voted bonds. Address The Mayor.

Tex., Newton—State Highway Dept., Austin, Tex., approved plans for surfacing 20.5 mi. Jasper-Newton-Louisiana Highway; gravel; \$230,000; including 580-ft. pile trestle bridge; J. E. Pousch, County Judge; W. T. Bolton, County Engr.

Tex., Palo Pinto—Palo Pinto County Comms. let contracts to T. J. Green, Mineral Wells, Tex., for following:

Grade Bankhead Highway from Mineral Wells to Parker County line.

Build 2 lateral roads from Mineral Wells, one east to Country Club and one south from Palo Pinto.

County Comms. will also build 2 lateral roads, one from Palo Pinto north and other from Mineral Wells south, toward Brazos.

Tex., Paris—Lamar County plans surfacing 9.8 mi. State Highway No. 19 north of Paris; gravel; \$63,500; W. L. Hutchinson, County Judge; W. M. Fooshee, County Engr.

Tex., Pearsall—Frio County will build 17.8 mi. 18-ft. bituminous macadam road on State Highway No. 2 from Pearsall to La Salle County line; \$316,415; J. C. Pranglin, County Judge; J. D. Metcalfe, County Engr.; will receive bids soon.

Tex., San Angelo—Tom Green County, Gibb Gilchrist, Engr., plans grading and constructing bridges and culverts on 23.44 mi. Ballinger-Sherwood road, from Middle Concho River to Rannels County line; \$50,000; application for aid submitted to State Highway Dept.; J. G. Mathison, County Judge.

Tex., San Angelo—Tom Green County plans grading and constructing drainage structures on 16.44 mi. Wall-VanCourt-Eden road, from San Angelo to Concho County line; \$53,000; J. T. Mathison, County Judge; Gibb Gilchrist, Engr. in charge.

Tex., San Benito—Charles Greenslade, City Clk., let contract to Dodds & Wedergartner, for 38,000 yds. concrete paving at \$3.35 yd. (Lately noted.)

Tex., Sierra Blanca—Hudspeth County plans grading, graveling and constructing drainage structures on 20.5 mi. Bankhead Highway; \$10,000; P. A. Hazzard, County Judge; Herbert Schroeter, County Engr.

Tex., Silverton—Briscoe County plans road improvements, including building State Highway No. 5-A; L. B. Richards, County Judge; M. E. Warrell, County Engr.

Tex., Sinton—San Patricio County, J. C. Hounts, County Judge, will surface 15.1 mi. of San Antonio-Corpus Christi road, eas branch of State Highway No. 9, with 1-in. bituminous topping; approx. cost \$105,000 soon invite bids; A. C. Pancoast, County Engr., Beeville, Tex.

Tex., Vernon—Wilbarger County, E. L. McHugh, County Judge, let contracts at \$406,000 for following: To J. P. Foty, Vernon, Tex., for 11.5 mi. concrete paving.

Virginia—State Highway Comsn., Richmond, Va., let contracts for following:

3.3 mi. surface treated macadam roadway between New Baltimore and Manassas; to L. J. Chandler, at \$53,000.

5 mi. bituminous macadam road south of Staunton; to Pace Construction Co., Roanoke, Va., at \$137,661.20.

1.1 mi. bituminous macadam road, connecting Clintwood and Fremont, Dickerson County; to Clintwood Construction Co., Clintwood, at \$34,428.06.

1.84 mi. concrete road in Halifax, Halifax County; to Southern Construction Co., Petersburg, at \$56,743.05.

4.44 mi. concrete road from Martinsville to Daniels Creek; to W. W. Boxley & Co., at \$119,483.87, conditional upon citizens advancing 50%. (Lately noted.)

Va., Charlottesville—City, B. A. Bennett, contemplates street paving; \$480,000.

Va., Fairfax—State Highway Comsn., Richmond, Va., let contract to Pardoe-Gillespie Co., Fairfax, Va., at \$134,876.74, for 5.01 mi. 16 ft. bituminous macadam highway, from Chantilly to Loudoun County line. Fairfax County. Project No. 168, Route No. 6.

Va., Fairfax—Fairfax County will build 8 mi. Lee Highway in County; votes Nov. 7.

on \$275,000 bonds. Address County Comms. (Lately noted.)

Va., Galax—City. For full details see Mch. Wanted—Paving and Water-Works Construction.

Va., Norfolk—City. For full details see Mch. Wanted—Paving.

West Virginia—State Road Comsn., will build 20 roads. For full details see Mch. Wanted—Road Construction.

W. Va., Huntington—City. For full details see Mch. Wanted—Paving.

W. Va., Martinsburg—State Road Comsn., Charleston, W. Va., will receive bids Nov. 14 for 4.24 mi. Martinsburg-Hedgesville road connecting Williamsport pike with Hedgesville.

Plans completing Martinsburg-Charles Town road; also Martinsburg-Berkeley Springs road; B. E. Gray, Div. Engr., Keyser, W. Va.

W. Va., Princeton—State Road Comsn., Charleston, W. Va. For full details see Mch. Wanted—Road Construction.

W. Va., Weston—Lewis County Comms. Court, Freeman's Creek Dist., plans building hard surfaced roads; will vote on \$800,000 bonds.

Sewer Construction.

Ala., Anniston—City let contract to J. F. Morgan Paving Co., Birmingham, for extending sewer lines in West Anniston. (Lately noted.)

Ala., Carrollton—City let contract to J. B. McCrary Co., Atlanta, Ga., for survey for installing water and sewer system.

Fla., Jacksonville—For full details see Mch. Wanted—Sewer Material.

Fla., Jacksonville—City will lay storm water pipes to drain about 40 acres in vicinity of 26th and Perry Sts., cost \$19,000; relay sanitary sewers on Myrtle Ave. between Enterprise and State St., cost about \$14,000; establish sewer out fall nr. end of Clay St., cost \$6655; W. E. Shedd, City Engr.

Tex., Laredo—City let contract at \$38,420.79 to Hanes Construction Co., San Antonio, for construction of storm sewers. (Lately noted.)

Fla., St. Petersburg—For full details see Water Works.

Ky., Frankfort—City, D. D. Smith, Mayor, will extend sewer system, about 2500 ft. of 15-in. terra-cotta pipe; will soon call for bids; Silas Wilson, City Engr. (Lately noted.)

La., Covington—City, Robt. W. Badon, Mayor, rejected bids for construction of sewer and water system; will issue new bids. (Lately noted.)

Md., Baltimore—Board of Awards, opened bids Oct. 18, for construction of storm water drains in district P-8, storm water contract No. 55, Donnie Catalan, 34 Knickerbocker Bldg., lowest bidder at \$38,758.15; Milton J. Ruark, Div. Engr. of Sewers, 311 Courtland St. (Lately noted.)

Md., Brunswick—City voted \$30,000 sewer and street bonds. Address The Mayor.

Md., Chevy Chase—For full details See Land Developments.

Miss., Laurel—For full details see Mch. Wanted—Paving and Sewer Construction.

Mo., Kansas City—For full details see Water Works.

Mo., Kansas City—Board of Public Works let contract at \$8560 to McGraw Construction Co. for construction of sewer in District 376, division 5 and let contract to Howard A. Williams for sewer in district 61, division 2.

Mo., St. Louis—For full details See Land Developments.

Mo., Springfield—City, will construct extension to sewer system, about 6000 ft. of

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standard 18" pipe, septic tank; construction by city forces; Geo. W. Culler, Engr. In Charge. (Lately noted.)

N. C., Dallas—For full details see Water Works.

N. C., High Point—City let contract to H. D. Perry, Bessemer, Ala. for sewerage work to cost approx. \$75,000. (Lately noted.)

Okla., Chickasha—City let contract at \$5,598.40 to I. E. Hansom for sanitary sewer in Dist. No. 33, 34, 25.

S. C., Clover—City will install sewer system and improve water system; votes Oct. 24 on \$65,000 bonds. Address The Mayor.

Tenn., Memphis—For full details See Water Works.

Tex., Cameron—City voted \$14,000 sewer bonds. Address The Mayor.

Tex., El Paso—City, Charles Davis, Mayor, has tentative plans by H. O. Duerr, Civil Engr. for improving pumping system at disposal plant; cost approx. \$8000.

Tex., Houston—City, O. F. Holcombe, Mayor, opened bids for Brunner Interceptor, main line sanitary sewer in West End, Charles K. Horton, lowest bidder at \$23,288.25; E. K. High lowest bidder at \$10,197 for construction of storm sewer on West Gray Ave. (Lately noted.)

Tex., Lubbock—For full details see Mch. Wanted—Sewer, Sewage Disposal and Water Plant.

Va., Petersburg—For full details see Land Development.

Telephone Systems.

La., Monroe—Cumberland Telephone & Telegraph Co., O. H. Bynum, Mgr., let contract to Deas Construction Co., to install underground conduit system, removing wires and cables from De Siard and S. Grand Sts.

Mo., Kahoka—Kahoka Telephone & Construction Co. contemplates increasing capital to \$45,000.

Textile Mills.

S. C., Gaffney—Gaffney Knitting Mill, C. M. Smith, Prest. let contract to J. R. Hugins for 1 story, frame building; 20x120 ft.; brick veneered; capacity 200 doz. pr. hosiery.

Va., Altavista—Altavista Cotton Mills, R. L. Tummock, Prest., will install 300 additional looms and carding equipment, double capacity of mills, cost approx. \$400,000.

Va., Petersburg—Textile Distributing Co., capital \$50,000, inceptd. with Tarlton F. Parsons, Prest.; T. F. Heath, Jr., Secy.

Water Works.

Ala., Carrollton—For full details see Sewer Construction.

Ark., Fort Smith—Fort Smith Water District Commrs. will construct water works plant.

Fla., Crystal River—City will construct water works system, considering voting on bonds; E. V. Camp and associates, Engrs., Moreland and DeKalb Aves., Atlanta, Ga.

Fla., Ft. Lauderdale—For full details See Land Development.

Fla., Miami—For full details see Mch. Wanted—Water Works equipment.

Fla., St. Petersburg—City votes Dec. 5 on the following bond issues: \$10,000 for paving portion of Fifth St.; \$60,000 for widening Beach Drive; \$125,000 for purchase of land and construction of inclinator; \$297,000 for drainage of certain districts; \$79,000 for constructing bridges; \$40,000 for city indoor playground; \$160,000 for extension of water mains; \$50,000 for extension of gas system.

Address The Mayor. (Lately noted.)

Fla., Zephyrhills—City will construct complete water works system, receives bids in Dec.; E. V. Camp and Associates, Engrs., Moreland and DeKalb Aves., Atlanta, Ga. (Lately noted.)

Ga., Atlanta—City, P. H. Norcross, Cons. Engr., will improve water works system; construct intake, 48-inch cast iron main, 18,500 ft. long, install pumping and power equipment, 21,000,000 gal. filter plant and 10,000,000 gal. clear water concrete reservoir, filter building 78x264 ft.; cost of reservoir \$250,000; bids opened Oct. 31 on 105,000,000 gal. daily pump; Case & Cathron, Nichols Construction Co., Jewell Filtration Co., both of Atlanta, General Contractors. (Lately noted.)

Ky., Newport—City opens bids Nov. 14 for installation of 6,000,000 gal. deep well pumping mch.; estimated cost \$140,000; Geo. Hornung, Cons. Engr., Wolf-Sack Bldg., Newport, Ky. (Lately noted.)

La., Broussard—City, R. N. Bernard, Mayor, will construct water works system; votes Oct. 31 on \$22,000 bonds.

La., Covington—For full details see Sewer Construction.

Md., Chevy Chase—For full details See Land Developments.

Md., Salisbury—Public Service Commn. and Salisbury Water Co., Louis Dalmas, Prest. considering improvements to water works supply.

Miss., Corinth—City will soon call for bids for water distribution system, including two 400 gal. centrifugal pumps, one 750 gal. centrifugal motor-driven pump, one deep well pump, also 13 fire hydrants; approx. cost, \$35,000; A. H. Beard, Engr., 616 Title Guaranty Bldg., St. Louis, Mo.

Mo., Kansas City—Water Commn. authorized repairs and improvements to Turkey Creek and Quindaro plants, cost approx. \$11,460; will also construct sewer connection from Turkey Creek pumping station to new sewer; bids opened Nov. 1.

Mo., Mountain Grove—City, Mayor Dennis, will construct additional well, pump, reservoir and extension of main, contemplates voting on bonds.

Mo., St. Louis—For full details See Land Developments.

N. C., Dallas—City will let contract in about 6 months for construction of water and sewer system; cost \$100,000; W. M. Pratt, Cons. Engr., 1st Nat. Bank, Durham.

N. C., Saluda—City contemplates installing waterworks system. P. H. Bailey, Mayor.

Okla., Tyrone—Town Board, L. F. Stewart, Clk., will soon receive bids for complete water works system; approx. cost \$70,000.

S. C., Clover—For full details See Sewer Construction.

S. C., Laurens—For full details See Mch. Wanted—Water Works Improvements.

Tenn., Memphis—City, C. C. Pashby, Clerk, will issue \$1,200,000 water bonds; \$1,332,000 street bonds; \$100,000 sewer bonds; \$252,000 terminal and warehouse bonds.

Tex., Breckenridge—Breckenridge Chamber of Commerce interested in construction of reservoir on Clear Fork of Brazos.

Tex., Houston—City, O. F. Holcombe, Mayor, let contract to Layne & Bowler, Memphis, Tenn., for well at Houston Heights water works plant.

Tex., Lubbock—For full details see Mch. Wanted—Sewer, Sewage Disposal and Water Plant.

Va., Elkton—Town, C. W. McGuire, Treas.,

contemplating installing water works system, cost \$75,000. (See Mch. Wanted—Water Works.)

Va., Front Royal—For full details see Mch. Wanted—Water Supply System.

Va., Galax—For full details see Mch. Wanted—Paving and Water Works Construction.

Va., Norfolk—For full details See Mch. Wanted—Water Supply and Fire Protection System.

Va., Petersburg—For full details see Land Development.

W. Va., Wheeling—The J. N. Chester Engineers, Pittsburgh, are engineers for water works improvements, consisting of new pumping station, boiler plant, intake and filtration plant, 20,000,000 gal. capacity; cost about \$1,000,000; also construct five 1,000,000 gal. steel reservoir tanks; opens construction bids Jan. or Feb.; machinery bids about Dec. 1.

Woodworking Plant.

Fla., Fort White—Boxes—Fort White Package Co., capital \$15,000, inceptd. with G. N. Crandall, Prest.; J. M. Sikes, Secy.

Fla., Oldsmar—Furniture—G. A. McNally, organize company to mfr. furniture from stems of leaves of palmetto palm.

Ky., Louisville—Automobile Bodies—Mengel Body Co., inceptd. by Arthur D. Allen and William L. Hoge, Louisville; W. C. Durant, Detroit, Mich. and others will erect plant on 30 acre site at 4th and G Sts., south of Southern railway and will also have track connections with Louisville & Nashville R.R.; plant consists of woodworking shops, dry kilns, assembling, painting and finishing depts.; containing about 200,000 sq. ft. floor space; mfr. bodies for light trucks, park and station wagons and regular chassis; estimated capacity for first year about 30,000 bodies; five year contract totaling \$20,000,000 has been obtained.

La., Baton Rouge—Wheels—Rodriguez Spring Wheel Co., capital \$25,000, inceptd. by Alcee J. Rodriguez, Edward Call and Clarence Deroche.

Md., Baltimore—Boschen-Smith Plano Co., Park Ave and Fayette St., capital \$50,000, inceptd. by John F. Boschen, John L. Smith and Lionel J. Perrin.

Miss., Lumberton—Ashbrook Veneer Co., inceptd. by S. J. and C. B. Ashbrook; establish mill, installing 72-in. Blakeslee back roll machine for mfr. of rotary cut veneer.

Mo., Kansas City—Wagstaff Box Mfg. Co., capital \$350,000, inceptd. by G. F. Boswell, A. L. Wagstaff, H. C. Elliott.

Mo., St. Louis—Artistic Furniture Co., cap. \$50,000, inceptd. by Max Manne, Frank Eckhoff, Fred H. Klein.

Mo., St. Louis—Aeolian Co. of Missouri, capital \$250,000, inceptd. by W. P. Chrisler, P. E. Peltason and H. M. Gilchrist.

Mo., St. Louis—Manne Bros. Furniture Co., capital \$30,000, inceptd. by Joseph and Harry Manne, A. L. Levi.

N. C., Mt. Airy—National Furniture Co., making extensive improvements to plant, including installation of two Moore Moist Air hardwood kilns.

S. C., —Box Shooks—Vance & Dwiggins Co., Kershersville, N. C. will remove plant to previously purchased site, construction by owners; has mch.; mfr. box shooks for canned goods.

Tenn., Memphis—Morrison Hoop & Lumber Co., capital \$25,000, inceptd. by E. C. Morrison, J. H. Hines and H. K. Boydston.

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FIRE DAMAGE

Ala., Auburn—Alabama Polytechnic Institute dormitory.

Ala., Birmingham—Norwood Coal & Transfer Co.'s warehouse, 23rd St. and 10th Ave., north; loss \$12,000.

Ala., Center—Farmers & Merchants Bank; Cherokee Supply Co.'s building; R. L. Henderson's store; W. A. Cobb's building; post office.

Ark., Althelmer—W. G. Key's gin; loss \$10,000.

Ark., Bellefonte—Missouri & Northern Arkansas R. R.'s depot; loss \$10,000. H. J. Armstrong, Ch. Engr., Harrison.

Fla., Odessa—Dowling Brothers' lumber mill; loss \$250,000.

Ga., Indian Springs—Calumet Hotel owned by C. T. King, Jackson, and Dr. Eugene B. Elmer, 170 N. Boulevard, Atlanta.

Ga., Milledgeville—Baldwin Furniture Co.'s store; loss \$50,000.

Ga., Roberta—W. F. Andrews' warehouse; Johnson's garage; Bankston & Webb's furniture store; post office; loss \$35,000.

Ga., Sylvester—J. L. Johnson's flour and feed mill.

Ky., Frankfort—Sanitary Milk plant, owned by H. H. Moore and others.

Ky., Harlan—Judge W. L. Bailey's residence; loss \$25,000.

Ky., Madisonville—Plant of Madisonville Messenger, loss \$7,000; Woodson Browning, Managing Editor.

La., Alexandria—Mrs. S. C. Melady's plantation; loss \$15,000.

La., Houma—Elster Wright's store on Main St.

La., New Orleans—S. J. Stewart Electric Co.'s building on St. Joseph St.; loss \$50,000.

La., Shreveport—Louisiana State Fair Assn.'s exhibit building; loss \$18,000.

Md., Baltimore—Garage buildings at 109, 111 and 113 Birkhead St., owned by John N. Peters; loss \$20,000.

Md., Baltimore—Porcelain Enameling Mfg. Co.'s plant at S. E. Cor Eight and O'Donnell Sts.; loss \$400,000; Stuart, Son & Co.'s plant at 501 President St., loss \$15,000.

Md., Bowie—Maryland State Colored Normal School; loss \$20,000; L. S. James, Prin.

Miss., Rosedale—Rosedale Compress Co.'s plant; loss \$35,000.

Miss., Houston—Store building of A. J. Harrington and J. B. Borington; loss \$100,000.

Miss., Mount Bayou—Christmas Gin Co.'s plant; loss \$22,000.

Mo., Bowling Green—High School; loss \$50,000. Address Board of Education.

Mo., Hayti—Roberts Cotton Oil Co.'s gin; loss \$6,000.

Mo., Kansas City—Joy O'Wheat cereal and flour plant at 911 Mulberry St.; loss \$40,000.

Mo., Mountain Grove—Mountain Grove Co.'s Creamery, Ice Cream, Ice and Electric plant; loss \$100,000.

Mo., St. Louis—Western Screw Products Co.'s building and equipment, loss \$50,000; plant located at 3217 S. Broadway.

N. C., Clinton—Atlantic Coast Line R. R.'s depot; J. E. Willoughby, Ch. Engr., Wilmington.

N. C., Durham—Durham Mattress Co's plant; loss \$18,000.

N. C., Henderson—Henderson Normal Institute's dormitory; loss \$15,000.

Okla., Muskogee—Martha Jones' building, 345-51 S. Second St.

S. C., Aiken—Thomas Hitchcock's residence.

S. C., Charleston—Warehouse on Pringleau St. occupied by Henry T. Foster.

S. C., Manning—F. C. Thomas' 4 frame houses.

Tenn., Johnson City—Slagle School south of Johnson City. Address School Board.

Tex., Austin—Dr. Robert E. Vinson's dwelling, 216 W. 27th St.; \$30,000 loss.

Tex., Bells—Bells Gin Co.'s gin; loss \$30,000.

Tex., Bradshaw—R. C. Malone gin; loss \$15,000.

Tex., Corsicana—Corsicana Cotton Warehouse Co.'s building.

Tex., Gonzales—Southern Pacific R. R.'s warehouse; W. Hood, Ch. Engr., San Francisco, Cal.

Tex., Greenwood—J. H. Rudd's store; Moore & Davis' building; Riley Merchandise Co.'s building; post office.

Tex., Jacksonville—Jacksonville Cotton Oil Co.'s plant.

Tex., Killeen—Cafe Disren; Young's Grocery; Bass & Huggins Cafe; Elite Bakery, owned by Cervenka Bros.

Tex., Lampasas—Cal Spivey's dwelling near Lampasas.

Tex., Lyons—E. J. Knesek Cotton Gin; loss \$20,000.

Tex., Navarro—W. B. Middlebrooks' gin; loss \$6,000.

Tex., Woodville—D. P. Rock's dwelling; loss about \$7500.

Va., Lynchburg—Pattern making shop of Lynchburg Foundry Co.; loss several thousand dollars.

W. Va., Maitland—Houston Collieries Co.'s 5 dwellings.

W. Va., Wheeling—Triangle Garage, loss \$10,000; owned by Virgil and Charles Slater.

Damaged by Explosion.

Okla., Bristow—Illinois Hotel. Address The Manager.

BUILDING NEWS

BUILDINGS PROPOSED

Apartment Houses.

D. C., Washington—Morris Cafritz, 912 15th St., N. W., will erect 7 buildings, 16th St. and Spring Rd.; brick; 3 stories; 45x90 ft.; H. Warwick, Archt., 1158 16th St., N. W.; owner builds.

D. C., Washington—Jos. E. Cooper, 1421 F St., N. W., is preparing plans for \$80,000 building, Porter St. nr. Carson Ave.; 20 suites; 75x170 ft.; 2 stories and basement.

La., New Orleans—L. D. Sokalsky & Son, 508 Carondelet St., plan 2-story apartment house or 2 duplex dwellings, St. Charles and Carrollton Aves., \$40,000; also 2 duplex dwellings, Palmer Ave. near Barrett St., and 1 at State and Freret Sts.; \$20,000 each; 2 stories; frame and stucco; owner will probably draw plans.

Md., Baltimore—Geo. C. Thomas, 408 New Amsterdam Bldg., plans number of apartments. (See Dwellings.)

Okla., Muskogee—O. R. Lorney will erect \$15,000 building, 613-15 E. Broadway.

Tex., El Paso—J. E. Bischoff will erect \$10,000 building, block 10, Franklin Hgts. addition; 1 story; brick.

Va., Richmond—Maplewood Building Corp. and P. J. Beattie will erect \$200,000 building, Davis Ave. near Rosewood Ave., West End; 54 suites; 3 stories; brick; Linder & Phillips, Archts.

Association and Fraternal

Ga., Augusta—Elks Club will erect building.

Ky., Louisville—Louisville Lodge No. 8, B.P.O.E., Kendrick R. Lewis, Chrmn. Bldg. Comm., receives bids until Nov. 1 at office of Joseph & Joseph, Archts., Francis Bldg., to erect 8-story and basement building; \$800,000; 140x180 ft.; concrete and steel skeleton. (Lately noted.)

Mo., Kansas City—Swope Park Masonic Building Assn. will erect \$100,000 temple, 60th St. and Swope Pkwy., for Park Lodge No. 617; fireproof; 50x144 ft.; reinforced concrete; cut stone exterior; auditorium to seat 750; 2 stories; Geo. W. Swehla, Archt.

Okla., Okmulgee—Elks Lodge No. 1136 will erect \$175,000 building; 3 stories and basement; 70x137 ft.; brick, concrete and stone; concrete joist construction; concrete foundations; steam heat; 1 passenger elevator and 1 freight lift; Smith & Senter, Archts., Commerce Bldg. (Lately noted.)

Tex., San Antonio—Bexar Lodge of Perfection No. 9, Scottish Rite Masons; \$800,000 Cathedral; 160x249 ft.; 110 ft. high; ground and auditorium floors; fireproof; steel frame; stone facing; Barrett specification roof with promenade tile decking; marble, tile, cement and hardwood floors; combination steam heating and ventilating plant; Herbert M. Greene Co., Archt., North Texas Bldg., Dallas; steel frame, foundation and first floor were constructed by owner; Ralph H. Cameron, supervising Archt., P. O. Box 1063, San Antonio, takes bids until Nov. 22 for completion of building; contracts awarded for terra cotta, cut stone, brick, tile and concrete materials. Address Mr. Cameron. (Lately noted.)

W. Va., Grafton—Grafton Lodge, Loyal Order of Moose, will erect \$35,000 addition to building on Washington St.; 3 stories.

Bank and Office.

D. C., Washington—Investment Building Corp., F. H. Smith Co., Financial Agent, purchased Bellevue Hotel, 15th and I Sts., N. W., and plans to expend \$125,000 to remodel for offices; 108x60 ft.; 7 stories.

Md., Baltimore—Farmers & Merchants National Bank will erect bank and office building, 865 W. North Ave.; \$25,000; 3 stories; stone and brick; 18x84 ft.; safety deposit vault on first floor; Henry L. Frank, Archt.

Md., Baltimore—Israel Silberstein, 697 Equitable Bldg., purchased Hoen Bldg., Lexington St. and Guilford Ave., and will remodel for offices and stores; \$100,000.

Miss., Jackson—Lamar Life Insurance Co. plans \$750,000 office building, Congress and Amite Sts.; 15 stories.

Mo., Kansas City—Peoples' Building Co.

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A. L. Parks, member of Board of Directors, is considering erecting 12-story office building, 10th and Oak Sts.; site 132x130 ft.; S. E. Chamberlain, Archt., 1707 S. 4th St., Kansas City, Kans.

Mo., Kansas City—Kansas City Joint Stock Land Bank, Walter Cravens, Prest., will erect 3-story addition to 2-story building, 15 W. 10th St.; \$80,000; bank on first floor.

Churches.

Ala., Montevallo—Presbyterian Church, Rev. P. H. Carmichael, Pastor, plans \$40,000 to \$50,000 building.

Ala., Reform—Methodist Church, Rev. T. R. Jordan, Pastor, will erect \$10,000 building, Main st.; brick; steam heat; auditorium, 40x46 ft.; basement, Sunday school rooms, etc.

Fla., Miami—Immanuel Lutheran Church will erect \$15,000 building, N. W. 4th St. and 5th Ave. Address The Pastor.

Fla., Tallahassee—Presbyterian Church plans building. Address The Pastor.

La., New Orleans—St. Dominic's Church, Father Jos. F. Waring, Pastor, 919 Cambronne St., plans to erect \$40,000 building at Burthe and Cambronne Sts.; 60x100 ft.

Md., Baltimore—Walbrook Presbyterian Church, Rev. Henry A. Grubbs, Pastor, receives bids until Oct. 31 to erect church and parish house, Ellamont St. and Walbrook Ave.; Mottu & White, Archts., 324 Charles St.; following contractors estimating: Gladfelter & Chambers, Roland Ave. and 36th St.; G. Walter Tovell, Eutaw & McCulloh Sts.; Tase & Norris, 106 W. Madison St.; John Waters Bldg. Co., 23 E. Centre St.; T. L. Jones & Son, 410 W. Saratoga St.; W. E. Harn Co., 2314 Oak St.

Mo., Carthage—First M. E. Church has no plans for Sunday school building as lately reported.

Mo., Kansas City—Church of the Assumption will erect church, school, school auditorium, priest's and sister's residences, heating and ventilating plants, at Lexington Ave. and Benton Blvd.; Dean & White, Archts.

N. C., Henderson—First M. E. Church, South, Rev. T. B. Vickers, Pastor, plans \$100,000 to \$150,000 building; probably select architect about January; construction about April.

N. C., Salisbury—Reformed Church building; Rowan County granite walls; slate roof. Address J. T. Wyatt, Route 3, Box 10, Salisbury, N. C.

N. C., Wilmington—St. James' Episcopal Church will erect parish house addition, Market St.; 2 stories and basement; tower from center; brick and stucco; Gothic type; auditorium; improve present parish house for class rooms; Hobart B. Upjohn, Archt., Grand Central Terminal, New York. (Previously noted.)

Okla., Muskogee—Spencer Chapel M. E. Church, colored, will erect \$20,000 building, N. 7th St. Address The Pastor.

Okla., Perry—St. Rose of Lima Catholic Church, Rev. Father Willibrod, Pastor; \$60,000 building; 38x124 ft.

S. C., Clover—First Baptist Church plans \$75,000 building. Address Rev. N. A. Hendrick, Pastor.

Tenn., Dresden—First Baptist Church, Rev. T. M. Hale, Pastor, will erect building.

Tex., Beaumont—First Baptist Church will erect \$150,000 building; reinforced concrete; 117x140 ft.; auditorium in main section; 4 stories for Sunday school; concrete floors; tar and gravel roof; stone base; face brick; stone trim; fireproof; Barglebaugh & Barnes,

Archts., Great Southern Bldg., Houston. (Lately noted.)

Tex., Brady—Baptist Church will erect \$24,000 building; auditorium to seat 700; Sunday school room; Will N. Noonan, Archt., San Antonio.

Tex., El Paso—Zion Evangelical Lutheran Church, F. W. Fahrenkamp, Chrmn. Bldg. Comm., will erect \$15,000 building, Pershing Drive and Birch St.; Sunday school room, furnace, etc. in basement.

Tex., Fort Worth—Riverside Baptist Church, Rev. P. H. Beckham, Pastor, will erect \$20,000 building, Central and Fry Sts.; brick veneer; construct 1 unit at present; Geo. Eagle, O. E. Phelps and others, Bldg. Comm.

Tex., Port Arthur—Central Baptist Church will erect \$20,000 building; brick and frame; concrete foundation; 2 stories; 44x75 ft.; wood floors; composition roof; steam heat; conduit system of wiring; Will N. Noonan, Archt.; M. L. Diver, Engr., Calcasieu Bldg.; both San Antonio. Address Rev. C. Bowles, Pastor. (Lately noted.)

Va., Clarendon—Methodist Episcopal Church, South, Rev. J. H. Florey, Pastor, will erect \$75,000 building; 3 stories; 47.5x90 ft.; brick and stone; slate roof; hollow fireproof tile; hardwood boars; rolling partitions; R. E. Mitchell, Archt., Homer Bldg., Washington, D. C.; bids about Nov. 1.

Va., Norfolk—B. F. Mitchell, Seaboard Bk. Bldg., is preparing plans for 3-story brick church.

Va., Portsmouth—Prentiss Place Baptist Church, W. A. Vance, Chrmn. Bldg. Comm., will erect building, Prentiss Ave. and Randolph St.; C. M. Major, Archt.

City and County.

Md., Baltimore—Fire Station—Board of Awards, Mayor Wm. F. Broening, Prest., will erect \$30,000 fire station, Pennington Ave., Curtis Bay; about 30x90 ft.; 2 stories; brick; slag roof; hot water heat; Fred'k. K. Thomas, Archt., 726 E. 33rd St. (Lately noted.)

Miss., Jackson—Auditorium—Armory—City and Hinds County will erect municipal auditorium and armory building, Congress and Pearl Sts.; \$125,000; steel trusses; auditorium to seat 4500, assembly room, etc.; N. W. Overstreet, Archt.; contract about Dec. 1 (Lately noted.)

Tex., Austin—Bath House and Pavilion—City, Walter L. Eyres, Water and Light Commissioner, will erect bathhouse and pavilion at Barton Springs Park; 2 stories; 106x75 ft.; accommodate 288 men and 160 women; compartments, lockers, showers, etc. on first floor; dance floor, 80x50 ft., on second floor; concrete, veranda surrounding building.

Va., Norfolk—Prison Farm—City, Walter H. Taylor, Director of Public Works, plans prison farm, City Home farm grounds in Princess Anne County; erect buildings.

Va., Richmond—Fire Alarm Station—City will erect central fire alarm station; public comfort station in basement. Address The Mayor.

Courthouses.

Fla., Tavares—Lake County will erect \$250,000 courthouse; 64x150 ft.; 4 stories; concrete, hardwood and tile floors; tile roof; brick and stucco; concrete foundation; Alan J. MacDonough, Archt., Eustis; bonds available. (Lately noted.)

Dwellings.

Ark., Harrisburg—Methodist Church Board of Trustees plan brick veneer parsonage.

Ark., Jonesboro—Horace Sloan will remodel residence; \$10,000; 2 stories and basement; hardwood floors; concrete foundation; composition shingle roof; Estes W. Mann, Archt., Memphis, Tenn. (Lately noted.)

D. C., Washington—Clarence Dodge, care of archt., will erect \$35,000 dwelling, Kalamazoo Rd., N. W.; 3 stories and basement; 24x38 ft.; brick and stone; Geo. N. Ray, Archt., 1147 Connecticut Ave., N. W.

D. C., Washington—B. H. Gruver will erect 20 dwellings in northwest section; \$200,000; 2 stories; 18x36 ft.; brick; stone trim; Geo. T. Santmyer, Archt., 1320 Eye St., N. W.; owner builds.

D. C., Washington—G. B. Bryan, 101 B St., S. E., will erect \$30,000 dwelling, 16th St., N. W.; 2 stories and basement; 67x53 ft.; brick; Pierson & Wilson, Archts., Washington Loan & Trust Bldg.

D. C., Washington—B. H. Gruver, 921 15th St., N. W., will erect 22 dwellings, Pierce Mill Rd., N. W.; \$150,000; 2 stories and basement; 20x32 ft.; brick; Geo. T. Santmyer, Archt., 1430 Eye St., N. W.; owner builds. (Construction begun on 6)

D. C., Washington—Paul Himmelfarb, Penn Oil Co., Rosslyn, Va., will erect dwelling, 16th and Decatur Sts., N. W.; stone, brick and stucco; 50x90 ft.; 2 stories and basement; Geo. Oakley Totten Archt., 828 17th St., N. W.

D. C., Washington—Thos. A. Jameson, 906 New York Ave., will erect 7 dwellings, Tennessee Ave. and E St.; \$42,000; brick; 2 stories and basement; 18x30 ft.; owner builds.

D. C., Washington—Robt. Munro, Woodward Bldg., will erect 13 dwellings; 2 stories and basement; 14x28 ft.; brick; Rich & Bell, Archts., 1301 G St., N. W.

D. C., Washington—Clarence Tankersley, 1886 Monroe St., N. W., will erect 3 dwellings, 217-19-21 5th St., N. W.; \$20,000; brick; 2 stories; 16x43 ft.; Geo. T. Santmyer, Archt., 1340 Eye St., N. W.; owner builds.

D. C., Washington—H. R. Howenstein, 1314 F St., N. W., will erect 5 dwellings, 5719-27 3rd St., N. W.; 2 stories and basement; 20 x38 ft.; brick; wood floors; tin roofs; \$7000 each; cement and brick foundations; owner builds; H. R. King, 717 5th St., N. E., heating; Arthur Snowden, 812 Kentucky Ave., S. E., plumbing; construction begun.

D. C., Washington—Leo May, care of archt., will erect \$50,000 dwelling, Kalamazoo Rd., N. W.; 3 stories and basement; 24x55 ft.; brick and stone; Geo. N. Ray, Archt., 1147 Connecticut Ave., N. W.

D. C., Washington—A. N. Miller, Union Trust Bldg., will erect \$25,000 dwelling, 3145 Newark St., N. W.; 2 stories and basement; 32x40 ft.; stone; owner builds.

D. C., Washington—Mrs. Robt. C. Ransdell, care of archt., will erect \$25,000 dwelling, 30th St., N. W.; 2 stories, attic and cellar; 61x36 ft.; brick and stone; Geo. N. Ray, Archt., 1147 Connecticut Ave., N. W.

D. C., Washington—Thrifty Building Co., Union Trust Bldg., will erect 9 dwellings, 14th and Spring Rd., N. W.; 2 stories and basement; brick; Geo. T. Santmyer, Archt., 1320 Eye St., N. W.

D. C., Washington—Harry Wardman, 1430 K St., N. W., will erect 6 dwellings, 3231-35-37-39-43-45 Klingle Rd., N. W.; 2 stories; 21x39 ft.; brick; Wardman & Waggaman, Archt., 1430 K St., N. W.; construction begun.

Ky., Mayking—Mayking Coal Co. will erect 10 miners' houses; contract at once.

Ky., Thornton—Elkhorn Collieries Co. will erect 50 miners' houses; contract at once; also erect store.

Ky., Typo—Blue Diamond Coal Co. will

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erect 20 miners' houses on First Creek.

La., New Orleans—L. D. Sokalsky & Son, 508 Carondelet St., plan duplex dwellings. (See Apartment Houses)

Md., Baltimore—Thos. M. Gontrum, Franklin Ave. nr. Belair Rd., will erect 3 dwellings, Furlay Ave. near Belair Rd.; \$12,000; 1½ stories; frame.

Md., Baltimore—J. Hurst Purnell, 4314 St. Paul St., will erect 12 dwellings and garages, 1900-22 N. Bentalou St.; 2 stories; brick; one 22.4x63 ft., eleven 20x30 ft.; slag roofs; steam heat; \$15,000; Geo. Wessel, Archt., 2752 Winchester St.; owner builds.

Md., Baltimore—Geo. C. Thomas, 408 New Amsterdam Bldg., purchased 25-acre section of Mondawmin, fronting on Liberty Hgts. Ave. and plans number of dwellings and apartment houses.

Md., Baltimore—Cleveland R. Bealmear, 501 Title Annex Bldg., purchased tract, S. W. cor. Montgomery and Thornton Aves., West Forest Park, and plans 20 bungalows or cottages; about \$100,000.

Md., Baltimore—Wm. J. Peters, Carroll Rd., will erect 17 2-story brick dwellings, 1333-64 Weldon Ave.; \$45,000.

Md., Baltimore—Geo. L. Schnader, 115 N. Chester St., will erect 4 dwellings, Gebb Ave. south of Batavia Ave.; \$16,000; 1½ stories; frame; 20x28 ft.; steam heat; owner builds.

Md., Baltimore—Conrad Dipple, 25 N. Ellwood Ave., will erect ten 2-family dwellings; \$20,000; 1½ stories; 26x28 ft.; frame; owner builds.

Md., Baltimore—John J. Kirkness, 300 E. 33rd St., will erect 5 dwellings, N. W. cor. 33rd and Calvert Sts.; one, 26x38 ft., and four, 22x38 ft.; 2½ stories; brick; Carey roofs; hot water heat; \$26,000; owner builds.

Md., Chevy Chase—Minor, Cooper & Gray, Inc., Washington, D. C., will erect dwellings. (See Land Development.)

Mo., Jefferson City—Carl W. Brown, Asst. State Hghwy. Engr., will erect dwelling on Cherry St.

Mo., Kansas City—Ed. S. Lindas, Lindas Lumber Co., will erect \$25,000 dwelling, 56th St. and Mission Dr., Mission Hills; English brick and frame; 2 stories; basement garage; 2 baths; A. H. Buckley, Gloyd Bldg., and Courtlandt Van Brunt, Archts.

Mo., Kirksville—Hiram Selby plans dwelling on E. Normal Ave.

Mo., Marshall—Asbury Roberts will erect dwelling on S. Odell St.

Mo., St. Louis—A. R. Schollmeyer will erect dwellings. (See Land Developments.)

N. C., Charlotte—Tremont Realty Co., M. B. Howell, Sec'y. will erect 30 bungalows, Tremont Ave.; shingle roof; hardwood and pine floors; brick foundations.

Okla., Oklahoma City—E. C. B. Wright will erect 2 frame dwellings and garages, 2122 W. 11th and 1147 W. 38th Sts.; \$10,500.

S. C., Columbia—Service Building Co., John Hughes Cooper, Prest., will erect 7 dwellings in Shandon Terrace in addition to 6 already under construction; \$6500 to \$10,000 each; various types; frame and brick veneer; 1 and 2 stories.

Tenn., Knoxville—Dr. C. M. Drake will erect \$10,000 dwelling, 503 W. Clinch Ave.

Tenn., Memphis—Mrs. W. N. Harrington will erect \$15,000 duplex dwelling, N. Bellevue Ave., Colonial type; brick veneer; stone trim; composition roof; Sieg & McDaniels, Archts.

Tex., Corsicana—L. T. Dernier will erect \$18,000 dwelling; frame; 10 rooms; 2 stories; concrete foundation; hardwood floors; hot

water heat; Ye Plannery, Inc., Archt., Dallas.

Tex., Dallas—Dines Building Co. will erect \$10,000 dwelling, 718 Ridgeway; 7 rooms; brick veneer.

Tex., Houston—H. C. Headington will erect \$13,500 dwelling, 4300-06 Rawlins St.; 9 rooms; brick veneer; also \$5000 two-apartment house, 206 E. 10th St.; 10 rooms; \$6000 brick cottage, 1931 Summit St.; 5 and 6-room frame cottages, 515, 619 and 1022 Martinique, 200 E. 10th, 5415 and 1110 Parry, 1106 Mount Auburn, 602 Cristler, 1927 Summit, 5002-23 and 5102-19 Phillips St., 5002-6-10-14-18-22, 5102-6-10-14-18 Gunter, 1111 St. Mary and 1112 Barry Sts.; \$108,950.

Tex., Dallas—Power Investment Co. will erect 8 cottages, 5200 block Terry St., and 6 cottages, 5200 block Ash Lane; 4 rooms; frame; \$1850 each.

Tex., Houston—Swedman & Page will erect \$14,150 dwelling, Graustark Ave.; 2 stories; 15 rooms.

Tex., San Antonio—H. C. Thorman will erect 111 bungalows in Highland Park.

Tex., San Antonio—W. A. Baity will erect 2 dwellings, Kings highway near N. Flores St.; 6 rooms; \$10,000.

Va., Altavista—Altavista Cotton Mills, C. J. Ashmore, Asst. Gen. Supt., will erect 35 dwellings.

Va., Arno—Stonega Coke & Coal Co., R. E. Taggart, Gen. Mgr., Stone Gap, plans 6 foremen's dwellings; \$36,000; 2 stories; probably hollow tile.

Va., East Radford—Lutheran Church, Rev. Chas. E. Kepley, Pastor, will erect parsonage; 6 or 7 rooms; architect not selected, desires plans.

Va., Richmond—W. Duncan Lee, Travelers Bldg., is preparing plans for \$45,000 dwelling, Monument Ave.; 2 stories; brick.

W. Va., Charleston—Fred O. Blue will erect \$20,000 dwelling, Edgewood Dr. near Charleston St.

Va., Virginia Beach—Huga W. Davis, Bank of Commerce Bldg., Norfolk, will erect 2-story dwelling; 28x34 ft.; brick, frame and stucco; Calrow & Wrenn, Archts., New Monroe Bldg., Norfolk.

W. Va., Bluefield—Bluefield College will erect 2 dwellings for faculty; 6 rooms each; also erect 5 more later. Address Prof. Lansdell.

W. Va., Charleston—W. F. Shawer will erect \$10,000 dwelling, Bradford St. near Lee St.; 8 rooms.

W. Va., Welch—J. H. Stamper, Northfork, will erect \$15,000 dwelling on Bluefield-Bramwell Road near Brush Fork; Colonial type.

Government and State.

Md., Baltimore—Death House, etc.—Board of Prison Control, Ogle Marbury, Prest., Fidelity Bldg., will remodel dormitory at State Penitentiary for deathhouse and execution chamber; \$20,000; Theo. Wells Pietsch, Archt., American Bldg.; bids opened Oct. 25.

Okla., Shawnee—Post Office—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., receives bids until Nov. 16 to erect post office; drawings and specifications from Custodian of site or from office Supervising Archt.

Hospitals, Sanitariums, Etc.

Ala., Jasper—Dr. A. C. Jackson, Birmingham, and others, plan \$75,000 hospital; 21 rooms.

Ala., Tuscaloosa—Alabama Insane Hospital, W. D. Partlow, M. D., Supt., will erect 2 reception wards at Bryce Hospital; T-shape; \$75,000 each; 2 stories; concrete to first

floor, hollow tile above; brick veneer; concrete and wood floors; D. O. Whilden, Archt., Title Bldg., Birmingham; A. J. Krebs Construction Co., Atlanta, Ga., Contr. for foundations at \$14,400. (Lately noted.)

Fla., St. Petersburg—City votes Dec. 5 on \$1,048,000 bonds, including \$100,000 for addition to city hospital; \$10,000 to erect Mercy Hospital, colored; \$40,000 for municipal warehouse and \$8000 for addition to Central fire station. Address The Mayor.

Tenn., Knoxville—Knox County Tuberculosis Assn. will erect \$100,000 tubercular sanatorium at Beverly; A. B. Baumann, Archt. (Lately noted.)

Tex., Wichita Falls—Wichita County, J. P. Jones, County Judge, recently defeated bonds and will vote Nov. 21 (extended date) on \$150,000 issue to erect branch hospitals at Burkburnett, Electra and Iowa Park. (Lately noted.)

Hotels.

Ark., Camden—Terral & Goodgame will erect 3 or 4-story building to replace Ouachita Hotel lately noted burned; \$75,000 to \$100,000; 100 rooms.

D. C., Washington—David D. Israel, Washington Hotel, is reported promoting erection of \$800,000 hotel, 20th and Chestnut Sts.; 12 stories and basement; 165x140 ft.; 300 rooms with bath, shower and running water.

Ky., Louisville—J. Graham Brown, Prest., W. P. Brown & Sons Lumber Co., receives bids about Nov. 1 to erect hotel; \$2,000,000; 140x191 ft.; 15 stories; 600 rooms with bath; ell shape above 3rd floor; colonial type; matted faced brick with stone trim; 4 elevators; Preston J. Bradshaw, Archt., 512 International Life Bldg., St. Louis. (Lately noted.)

La., Monroe—Monroe Hotel, J. E. Doughtie, Mgr., will receive bids until Nov. 7 at office Wm. Drago, Archt., 7831 Jeanette St., to erect annex, construct lobby, install elevator, etc.; addition, 3 stories; 40x150 ft.; brick and frame; 48 rooms with bath; \$70,000. (Lately noted.)

Mo., Kansas City—Girl's Hotel, 1805 Jefferson St., will erect \$85,000 annex; 4 stories; 128x38 ft.; brick; accommodate 100; Keene & Simpson, Archts. (Previously noted.)

Tex., Austin—Jno. B. Pope is Chrmn. Comm. promoting erection of \$800,000 hotel.

Miscellaneous.

Ala., Selma—Orphanage—Board of Directors, Alabama Methodist Orphanage, J. H. Wilson, Prest., Lincoln, plans to erect \$250,000 building.

Mo., St. Louis—Undertaking Establishment—Peetz Bros., 2739 LaFayette Ave., will expend \$18,000 to remodel building, 2700 LaFayette Ave.; brick; V. L. Kluto, Archt., Syndicate Trust Bldg.

Tex., Austin—Home—Rotary Club, L. Theo. Belmont, Prest., will erect \$10,000 building for Children's Home.

Railway Stations, Sheds, Etc.

N. C., Clinton—Atlantic Coast Line R. R., J. E. Willoughby, Ch. Engr., Wilmington, plans to erect station and warehouse; brick.

Tenn., Knoxville—Louisville & Nashville R. R., W. H. Courtenay, Ch. Engr., Louisville, will erect \$320,000 freight station; 600x50 ft.; brick, concrete and steel; concrete and steel roof; fireproof steel doors; bids opened Oct. 25. (Lately noted.)

Va., Richmond—Atlantic Coast Line R. R., A. M. Griffin, Archt., Wilmington, N. C., will erect \$100,000 freight terminal; brick.

Schools.

Ala., Albany—Board of Education, E. W.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Cowart, Supt., will erect \$200,000 high school.

D. C., Washington—Misses Maret French School will erect \$50,000 building Kalorama Rd., N. W.; 4 stories; 50x36 ft.; Horace W. Peaslee, Archt., 1504 H St., N. W.

D. C., Washington—Catholic University School of Sacred Sciences will erect 4-story extension to Divinity Hall.

Ga., Atlanta—Board of Education receives bids until Nov. 10 at office J. N. Landres, City Purchasing Agt., for general contract and mechanical work for colored junior-senior high school; plans and specifications at office E. C. Wachendorf, Archt., and office A. Ten Eyck Brown, Supervising Archt., Forsyth Bldg. (Lately noted.)

Ga., Augusta—Richmond County Board of Education, Lawton B. Evans, Supt., plans to enlarge buildings at Monte Sano and Hephzibah schools.

Ky., Louisville—Board of Education receives bids until Nov. 27 to erect John M. Atherton High School for Girls, Morton and Rubel Aves.; \$300,000; Tudor Gothic style; 3 stories and basement; brick; terra cotta trim; gymnasium 50x80 ft.; Joseph & Joseph, Archts.

La., Mangham—Mangham and adjoining school districts plan election on \$100,000 bonds to erect building. Address Richland Parish School Board, Rayville.

La., Start—Richland Parish School Board, Rayville, plans to call election on \$50,000 bonds to erect consolidated school.

Md., Baltimore—Board of Awards, Mayor Wm. F. Broening, Prest.; Northeast Junior High School in Clifton Park; 3 stories and basement; 400x160 ft.; 30 classrooms; assembly hall to seat 2000; hollow fireproof and interior tile; hardwood, concrete and tile floors; ornamental terra cotta; plaster board; wire glass; steel sash and trim; indirect steam heat and ventilators; electric lights; Josias Pennington, Archt., Professional Bldg.; J. Henry Miller, Inc., Eutaw and Franklin Sts., low bidder at \$997,000. (Lately noted.)

Md., Elkton—Cecil County votes Nov. 7 on \$150,000 bonds. Address County Board of Education.

Miss., Collins—School Trustees will receive separate bids until Oct. 30 to erect school, install plumbing and heating, and electric wiring; \$30,000; 1 story; brick; plans and specifications at office City Clerk. (Lately noted.)

Miss., New Hope (P. O. Columbus)—New Hope Consolidated School Dist. Trustees will erect building; \$20,000 bonds voted.

Miss., Petal—Forrest County School Board, J. C. Gay, Supt., Hattiesburg, rejected bids receives new bids until Nov. 10 to erect \$30,000 building; brick, wood floors; plans and specifications at office N. W. Overstreet, Archt., Jackson. (Lately noted.)

Miss., Utica—School Board will receive bids until Nov. 10 to erect building; plans and specifications at office D. C. Simmons.

Miss., Wesson—County Board of Education, J. G. Martin, Supt., will erect dormitory to replace structure lately noted burned at Copiah-Lincoln Agricultural High School.

Miss., Vicksburg—City, J. J. Hayes, Mayor, receives proposals at meeting of Mayor and Aldermen, Dec. 4 for plans and specifications for erection of 2 schools; information at office S. S. Patterson, City Clk. (Previously noted.)

Mo., Brookfield—Board of Education, Dist. No. 2, Raymond Bushnell, Supt., will erect \$12,000 building; 2 stories and basement; brick; stone trim; Harry Gwyn, Archt., South Gifford.

Mo., Columbia—Stephens College purchased

site and plans to erect four \$150,000 dormitories, and \$250,000 library building; dormitories to accommodate 600 girls. Address The President.

Mo., Kansas City—City Board of Education will erect Southeast High School, 48th St.; \$1,400,000; Askew School, 27th St. and Topping Ave.; Hale H. Cook School, 44th St. and Penn Ave.; Chas. Smith, Archt.; Frances Willard and Shiloh Schools; gymnasium at Humboldt School, 11th and Holmes Sts. (Lately noted to vote Oct. 28 on \$500,000 bonds.)

Mo., Mansfield—Board of Education will erect \$25,000 school; 2 stories and basement; 56x80 ft.; brick; stone trim; Earl Hawkins & Co., Archts., McDaniel Bldg., Springfield; day labor under supervision of J. J. Crippen. (Lately noted.)

Mo., Paris—Board of Education will erect gymnasium for high school.

Mo., St. Louis—Board of Education, 9th and Locust Sts., receives bids until Nov. 8 to erect C. P. Walbridge and Edward Long grade schools; 95x221 ft.; 2 stories; reinforced concrete and brick; \$300,000 each; R. M. Milligan, Archt., Board of Education Bldg.

N. C., Asheville—Haw Creek School Dist. voted \$50,000 bonds; plans to borrow \$10,000 additional and erect \$60,000 school; 12 rooms; brick; gymnasium; Frank Wells, Supt. of Public Instruction. (Lately noted.)

N. C., Charlotte—Mecklenburg County Bd. of Education will erect \$30,000 building in Long Creek township; brick and tile.

N. C., Clinton—School Board, H. J. Hines, Chrmn., receives bids until Nov. 13 to erect building; 133x127 ft.; brick; built-up roof; wood floors; direct-indirect radiation; plans and specifications at office Benton & Benton, Archts., Wilson. (Lately noted.)

N. C., Durham—Durham County Board of Education, Jno. W. Carr, Jr., Supt., rejected bids to erect East Durham School and will have plans revised and call for new bids; Rose & Rose, Archts. (Lately noted.)

N. C., Washington—City voted \$300,000 bonds to erect 2 schools. Address Board of Education. (Lately noted.)

Okl., Claremore—Board of Education will erect 4-room brick school for negroes.

Okl., Luther—Board of Education, A. M. McClure, Clk., will erect gymnasium and auditorium; \$13,000; 1 story; 80x90 ft.; brick; Hawk & Parr, Archts., Magnolia Bldg., Oklahoma City.

S. C., Anderson—School Trustees, Dist. No. 17, W. P. Wright, Secy., will erect boys' high school, S. McDuffie and Broyles Sts.; 179x70 ft.; 10 rooms and auditorium; ordinary construction; asphalt built-up roof; rift pine and maple floors; steam vacuum vapor heat; electric lights; Casey & Fant, Archts., 112 N. Main St., Anderson; Batson Cook Co., West Point, Ga., is low bidder at \$84,000. (Lately noted.)

Tex., Commerce—School Board, L. B. England, Chrmn., receives bids until Oct. 27 to erect \$120,000 high school; plans and specifications at office C. E. Banglebaugh, Archt., 301 Masten St., Dallas, and Commerce. (Lately noted.)

Tex., Houston—Harris County Common School Dist. No. 6 will erect building; \$10,000 bonds available. Address County School Supt.

Tex., Waco—Baylor University, Dr. S. P. Brooks, Prest., will erect \$150,000 library; 4 stories; 84x100 ft.; hollow fireproof tile and reinforced concrete; tar and gravel roof; concrete, tile and cork floors; vault door; steel sash; 4x4 ft. electric elevator, lifting capacity 1000 lb. and speed of 100 ft. per

min., travel 40 ft.; electric lights; heating from central plant. Address Birch D. East-erwood, Archt., First State Bank Bldg. (Lately noted.)

Va., Buena Vista—City, J. M. Upkike, Mayor, will erect \$50,000 high school; 80x140 ft.; brick; Stanhope S. Johnson, Archt., People's Bank Bldg., Lynchburg.

Va., Charlotte—Chi Phi Fraternity, University of Virginia, will erect \$35,000 frat house; 3 stories; 61x34 ft.; brick; E. Brad-bury, Archt., Natl. Bank Bldg.

W. Va., Gary—Adkin School Dist. votes Nov. 7 on \$150,000 building bonds. Address Dist. School Trustees.

W. Va., Rock—Rock School Dist. votes Nov. 7 on \$100,000 bonds to erect high school near McComas; addition to Spanishburg building; complete Matoaka grade school; grade buildings at Crystal, Coopers, Gardner, Widemouth, Arista, Springton; auditorium and gymnasium at Bramwell; 1-room building for Hill section; repairs to other rural schools; J. M. Crozier, Prest., Board of Education.

W. Va., Rowlesburg—Reno School Dist. No. 8, G. A. Deakins, Secy., will erect building.

Stores.

Ala., Montgomery—Klein & Son will expend \$20,000 to remodel building at Dexter Ave. and Court Sq. for store; 3 stories; brick.

Ark., El Dorado—Jno. H. Brown Co. will erect store and apartment building on Washington St.; 2 stories.

Ark., Waldo—C. C. Fincher will erect 2-story brick store and office building on Main St.

D. C., Washington—Howard Etchison, Davidson Bldg., will erect stores 3700-28 14th St., N. W.; \$77,000; 1 story; Robt. A. Scholz, Archt., 1465 Colorado Rd., N. W.; owner builds.

D. C., Washington—Oliver B. Jenkins, 800 10th St., N. W., will erect store; 3 stories; brick; Harry Miller, Archt., 700 10th St., N. W.

D. C., Washington—Marcus Notes, 439 9th St., N. W., will erect \$80,000 store and apartments, Georgia Ave. and Hamilton St., N. W.; 2 stories and basement; 20x45 ft. and 25x61 ft.; brick; Geo. T. Santmyers, Archt., 1340 I St., N. W.

Fla., West Palm Beach—F. M. Blandford will erect \$10,000 store, Lake Ave. between Olive and Poinsettia Sts.; 42x57 ft.

Ky., Hazard—Dr. J. P. Boggs will erect \$15,000 store and apartment building; brick; day labor.

Ky., Thornton—Apex Coal Co. will erect store; contract soon.

Ky., Thorton—Elkhorn Collieries Co., Bastin, will erect store; contract at once.

Ky., Lexington—Davis & Wilkinson will erect store and office building, 221 E. Main St.; 2 stories and basement; brick; stone trim; Arthur Gianni, Archt., Georgetown St.

Ky., Lexington—Donald B. Neal, Main St., will erect \$22,000 store and apartment building; 2 stories and basement; 53x80 ft.; brick; Jno. V. Moore & Co., Archts., McClelland Bldg.

Ky., Millstone—G. H. Picklesimer & Co. will erect store at once.

Ky., Thornton—Elkhorn Collieries Co. will erect store. (See Dwellings.)

Ky., Whitesburg—S. H. Hartt will erect \$20,000 store at once.

Mo., St. Louis—A. R. Schollmeyer will erect stores. (See Land Developments.)

La., Bastrop—Judge Fred M. Odom will erect brick double store.

Md., Baltimore—Andrew G. Steelman, 760

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

W. Lexington St., will remodel 4-story business building, Lexington St. and Fremont Ave.; also erect 1-story addition; John Freund, Archt., 1307 St. Paul St.

Mo., Kansas City—A. R. and Harry Jones will remodel building, Linwood Blvd. and Robert Gillham Rd. for 5 shops; \$15,000; Archer & Gloyd, Archts.

Mo., Kansas City—J. K. Wittman will erect store; 1 story and basement; 11x183 ft.; frame and stucco; Sunderland & Besecke, Archts., Interstate Bldg.

N. C., Asheville—T. C. Cox will erect 2-story building, Patton Ave. and Otis St.; 50x85 ft.

N. C., Asheville—Dr. E. W. Grove will erect building for S. Liplinsky Sons & Co., \$200,000; 5 stories; 100x125 ft.; concrete; wood floors; W. L. Stoddard, Archt., 9 E. 40th St., New York. (Lately noted).

S. C., Clover—Geo. Williams will erect store.

S. C., Clover—Dr. R. L. Wylie and others plan to erect drug store.

Tenn., Memphis—E. B. Wiesner plans to erect 2 brick stores on Union Ave.

Tenn., Memphis—Jos. Hanover will erect 4 stores; 85-ft. frontage half of which to be 2 stories; brick and tile; concrete floors; composition roof; \$20,000. Sieg & McDaniels, Archts.; construction begun.

Tenn., Memphis—L. L. Diehl, 1663 Forrest Ave., will erect \$25,000 building, Florida St. nr. S. Parkway; 1 story; 60x130 ft.; brick; plans and construction by owner.

Tex., Fort Worth—Leon Williams will erect 1-story brick building, Towson and Rogers Ave.; \$10,000.

Tex., Waco—G. Stratton will erect \$60,000 building, 8th and Austin Sts., for Stratton-Stricker Furniture Co.; 50x165 ft.; 4 stories and basement; semi-fireproof; hollow fireproof and interior tile; steel sash and trim; wood floors; metal ceilings; wire glass; vaults; ventilators; one passenger and one freight elevator; Henry L. Spencer, Archt.

W. Va., Clarksburg—Follo Bros. will erect building on N. 4th St.; \$25,000; 1 story and basement; E. J. Wood, Archt.

W. Va., Clarksburg—Latstetter Estate will erect building on W. Pike St.; \$33,000; 1 story and basement; steel and concrete; S. W. Ford, Archt.

W. Va., Fairmont—L. G. Giordano, Box 486, will erect \$15,000 store and apartments

on Pennsylvania Ave.; 75x75 ft.; 2 stories; tile and brick; owner builds; bids desired on plastering, plumbing and wiring. (See Mch. Wanted—Beams (Iron); Plate Glass; Lumber.)

W. Va., Huntington—D. B. Gwinn, 10th St. and 2nd Ave., will erect \$40,000 store and office building; 3 stories and basement; 50x70 ft.; brick; stone trim; Meanor & Handloser, Archts., R. & P. Bldg.

W. Va., Martinsburg—Geo. M. Bowers will expend \$10,000 to remodel Thume Bldg. on S. Queen St.

Theaters.

Fla., Leesburg—H. M. Goethe, Manning, will erect \$25,000 theater and store; 72x110 ft.; 2 stories; brick and stucco; tile and wood floors; concrete and brick foundation; asbestos shingle roof; interior tile; metal ceilings; wire glass; ventilators; American Radiator Co.'s type of heating plant; theater to seat 700 to 800; bids opened Oct. 20; W. H. Carr, Archt., St. Petersburg. (Lately noted.)

Warehouses.

Ark., Arkadelphia—Farmers Union Warehouse Co. will erect building to replace structure lately noted burned.

Fla., Miami—City Commissioners plan to erect warehouse at city docks to be occupied by Clyde Steamship Co.; C. D. Leffler, Mayor.

Fla., St. Petersburg—City votes Dec. 5 on \$40,000 for warehouse. (See Hospitals.)

La., New Orleans—Carrollton Feed Co. will erect warehouse, Franklin and Beauregard Sts.; 1 story; 40x150 ft.; probably brick; bids opened Oct. 20; Burke & Dufrechou, Archts., 411 Balter Bldg.

Mo., Joplin—Art Co., 1617 Joplin St., will erect \$35,000 warehouse; 1 story and basement; 100x125 ft.; hollow fireproof tile, cement and brick; cement floors and foundation; built-up asphalt roof; metal ceilings and doors; vaults; vault lights; ventilators; steel sash and trim; wire glass; owner builds. (Lately noted).

Tenn., Knoxville—Chandler & Co. will erect combination warehouse, garage and filling station; \$12,000.

Va., Richmond—Wheeling Corrugating Co., Jos. Entriakin, Mgr., 801 McDonough St., will expend \$15,000 to erect addition and remodel warehouse, 9th and Perry Sts.; 2 stories and basement; reinforced concrete; L. P. Hartsook, Archt., American Natl. Bank Bldg.

work; Otis Elevator Co., elevators, both New York; L. S. Gillette, Chrmn., Bldg., Comm., care Plymouth Investment Co., Minneapolis, Minn., (Contract for furnishing and erecting steel work lately noted let to American Bridge Co., 71 Broadway, New York.)

Mo., Pocomoke City—Citizens' National Bank; \$50,000 building to replace burned structure, Market St.; 1 story and basement; steel, brick and limestone; Theo. Wells Pletach, Archt., American Bldg.; C. E. Painter, Engr., 324 N. Charles St.; both Baltimore; H. B. Pilchard, Pocomoke City, contr. on percentage basis.

Miss., Raymond—Merchants & Planter's Bank; \$19,500 building; brick; 42x90 ft.; concrete foundation and floors; W. L. Brasher, Jr., Archt.; S. L. Williams & Co., Contrs., Jackson.

Churches.

Fla., Jacksonville—Springfield Presbyterian Church, Rev. W. A. Cleveland, Pastor; \$45,000 building, Sixth and Silver Sts., Springfield; Spanish renaissance; brick walls covered with dash coat of coquina; Greeley & Benjamin, Archts.; Jacksonville; J. W. C. Corbusier, Consulting Archt., Cleveland, O.; Ponder-Hammell, Contr.; Chapman & Walker, plumbing and heating; both Jacksonville; ultimate plans call for expenditure \$100,000.

Mo., Baltimore—Keen Memorial M. P. Church; \$25,000 Sunday school and social building, Huntington Ave. and 30th St.; 45x40 ft.; 2 stories; brick, stucco and wood; slag roof; wood floors; steam heat; E. G. Blanke, Archt., 213 N. Calvert St.; Adam Kratz, Contr., 118 S. Carrollton Ave.

Mo., Dexter—First Presbyterian Church; \$30,000 building; brick and stone; 2 stories; concrete (bowl) floor; concrete foundation; pitch roof; R. H. Helm, Archt., Chattanooga, Tenn.; Chesley Clements, Contr., Broomfield, Mo.; contr. desires bids on plumbing, steam heating plant and electrical work. (See Mch. Wanted—Concrete Mixer.)

Tenn., Memphis—Union Avenue Methodist Church, A. E. Jones, Chrmn. Bldg. Comm.; \$75,000 auditorium, S. Cooper St. and Union Ave.; accommodate 1500; Ionic design; brick; Bedford stone trim; art glass windows; pipe organ; Hubert T. McGee, Archt., Scimitar Bldg.; D. L. Crouch, Contr.

City and County.

Ala., Birmingham—Market—City, C. E. McLondon, Prest. Commn.; \$195,000 market house, 3rd Ave. and 23rd St.; 140x200 ft.; 1 story; reinforced concrete; brick walls; tar and gravel or concrete and tile slab roof; tile floors on concrete; hollow fireproof and interior tile; rolling partitions; wire glass; steel sash and trim; steam vacuum heat; conduit system electric wiring; freight elevator; refrigerating plant; Martin J. Lide, Archt. and Conslt. and Constr. Engr.; Inglenook Construction Co., Contr.

Tex., Breckenridge—Municipal Building—City; \$52,981 city hall and fire station; fireproof; brick and concrete; David S. Castle, Archt., Radford Bldg., Abilene, and Dallas County State Bank Bldg., Dallas; Walsh & Burney, Contrs., San Antonio; S. P. Osborne, Fort Worth, plumbing, \$1910.

Tex., Del Rio—City Hall and Fire Station—City; \$17,266 city hall and fire station; J. Harrington & Co., Archts., San Antonio; T. A. Siever, Contr., Del Rio.

Tex., San Antonio—Market—City, O. B. Block, Mayor; remodel market house and erect annex to east wing and install refrigerating plant, etc.; 96x120 ft.; 1 story; concrete, steel and brick; tile roof; terrazzo, tile, wood block and cement floors; hollow fire-

BUILDING CONTRACTS AWARDED

Apartment Houses.

Md., Baltimore—M. S. Myerhoff, Prest. Park Hgts. Development Co., 449 Equitable Bldg.; 3 buildings, Reisterstown Rd. near Callow Ave.; \$100,000; brick; 39 x 56 ft.; 4 stories; Carl H. J. Zink, Archt., Holly and Hawthorne Ave., Hamilton; Allied Construction Co., Contr.

Association and Fraternal.

Ark., Pine Bluff—Elks Lodge No. 149; \$65,000 building; 2 stories; English type; red brick; tile porch; Mitchell Selligman, Archt.; E. C. Royse, Contr.

Fla., Leesburg—Leesburg Lodge No. 58, A. F. & A. M.; \$65,000 temple; 3 stories and basement; 54x102 ft.; hollow tile, brick and stucco; concrete and hardwood floors; built-up asphalt roof; concrete foundation; hollow fireproof and interior tile; metal ceilings; steel sash and trim; ventilators; Alan J. MacDonald, Archt., Eustis; J. J. Chafin,

Contr., Leesburg; archt. receives bids until Oct. 28 for heating, plumbing and electrical work.

Tenn., Memphis—Al Chymia Temple Nobles of Mystic Shrine, Buford M. White, Potentate; \$600,000 temple; 10 stories and basement; fireproof; brick; terra cotta exterior; 8 floors for offices; cafe and roof garden; gymnasium and swimming pool in basement; Jones & Furbringer, Archts.; Hanker & Cairns, Asso. Archts.; Kaucher, Hodges & Co., Contrs.

Bank and Office.

D. C., Washington—Chamber of Commerce of United States, D. A. Skinner, Secy., \$1,500,000 building, Lafayette Sq. 158x149 ft.; 4 stories; Cass Gilbert, Archt., 244 Madison Ave.; Jas. A. Stewart & Co., Contrs., 30 Church St., both New York; W. G. Cornell Co., Washington, heating, plumbing and gas fitting; L. K. Comstock & Co., electrical

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proof and interior tile; metal doors; ventilators; steel sash and trim; Leo M. J. Dielman, and B. V. Spillman, Archts.; Chas. Schoenfeld, Contr. for east wing at \$120,400, and to remodel market house on cost plus basis; Kirkwood & Wharton, plumbing, \$3540; San Antonio Machine Co., refrigerating machine.

Dwellings.

D. C., Washington—Laurence P. Johnston and C. D. Hood, 311 Davidson Bldg.; \$23,950 dwelling; 40x32 ft.; 2 stories; concrete foundation; oak floors; Ludowic tile roof; Kellastone, magnesite and stucco; hollow tile; plans and construction by Mr. Johnston, A. C. Ketchum, Bethesda, Md., heating; Powers Electric Co., 716 14th St., N. W., Washington, lighting; M. J. McCarthy, 609 2nd St., N. W., plumbing. (See Mch. Wanted—Plastering; Millwork; Lumber.)

Fla., St. Petersburg—Pasadena Estates, Inc., Jack Taylor, Prest., will erect dwelling at Pasadena-on-the-Gulf; contract let; also plan others.

Ga., Americus—Dave R. Andrews; \$20,000 dwelling, 120 Taylor St.; shale brick; tile roof; hardwood and rift pine floors; 10 rooms; 2 stories; T. F. Lockwood, Archt., Murrah Bldg., Columbus; W. H. Little, Contr., Cordele; plumbing, heating and wiring not in general contract.

Ga., Columbus—F. W. Teague; \$20,000 dwelling; 2 stories; Italian type; 12 rooms; brick; asbestos shingle roof; vapor-vacuum heat; tile baths and porches; T. F. Lockwood, Archt., Murrah Bldg.; W. C. Whitaker, Contr.

Md., Baltimore—Clara Muller, 3010 Barclay St.; \$10,000 dwelling and garage, Glittings Ave. and Oak Lane; 35.8x23.8 ft.; 3 stories; brick; hot water heat; Walton Co., Inc., Archts.-Constr., York and Cedarcroft Rds.

Md., Baltimore—Jas. Coburn; \$12,000 dwelling and garage, 3605 Garrison Blvd.; 2 stories; hollow tile; John H. Sier, Archt., 3705 Chatham Rd.; Annex Construction Co., Contr.

N.C., Charlotte—Thos. C. Harris; \$10,000 dwelling, Morehead St.; 7 rooms; brick and wood; Blythe & Isenhour, Constr.

Tenn., Memphis—S. Gordon Brent; Colonial type dwelling, S. Parkway and Weatherford St.; \$25,000; 2 stories; brick veneer; stone and wood trim; composition roof; 2 tile baths; cedar lined linen closets; laundry and heating plant in basement; Sieg & McDaniels, Archts.; Lewis R. Jones & Co., Constr.

Tex., San Antonio—I. T. Cutler; \$10,000 dwelling, Garey Rd. and Elder St.; A. Schweitzer, Contr.

Tex., San Antonio—Judge Talferro; remodel and enlarge dwelling; \$10,000; W. N. Hagy, Contr.

Tex., San Antonio—Geo. Wroten, Wroten-Hundley Motor Co.; \$13,000 dwelling; frame and stucco; Atlee B. Ayres & Robt. M. Ayres, Archts., Bedell Bldg.; W. C. Thrallkill, Contr.

Government and State.

Ga., Atlanta—Post Office—M. L. Thrower Agency; \$150,000 building, for supplementary post office, Forsyth and Garnett Sts.; 145x180 ft.; 1 story and basement; structural steel and hollow tile; 4 entrances and private alley; 100-ft. platform in rear; J. W. Jenkins, Archt.-Contr.

La., Alexandria—Post Office and Court House—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C.; extension, remodeling, etc. of post office and courthouse; \$64,500; concrete and hardwood floors; concrete foundation; gravel roof; hollow fireproof and interior tile; metal

doors; vaults; ventilators; rolling partitions; steel sash and trim; wire glass; Wm. MacDonald Construction Co., Contr., 428 Odd Fellows Bldg., St. Louis, desires bids on materials and sub-contracts. (See Mch. Wanted—Building Material).

Tex., Point Isabel—Coast Guard Station—United States Coast Guard, J. C. Oaker, Special Engr.; \$40,000 coast guard station; 2 stories; 1000-ft. creosoted pile wharf; J. M. Landrum, Contr., Galveston.

W. Va., Charles Town—Post Office—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C.; \$59,381 post office; E. G. Heflin, Contr., Fredericksburg, Va.

Hotels.

Ga., Atlanta—Dinkler Hotel Co.; 125-room addition to Ansley Hotel; reinforced concrete; \$270,000; G. Lloyd Preacher & Co., Archts.; H. J. Carr & Co., Constr., Candler Bldg.

Miscellaneous.

Ky., Ashland—Clubhouse—Bellefonte Country Club, W. B. Seaton, Prest.; \$50,000 clubhouse; 2 stories and basement; brick, frame and stucco; hardwood floors; Schenck & Williams, Archts., Dayton, O.; Simpson & Elswick, Constr., Ashland.

Railway Stations, Sheds, Etc.

Tex., Fort Worth—Missouri, Kansas & Texas R. R., Frank Ringer, Ch. Engr., St. Louis; extension to freight station; 1 story; 147x60 ft.; concrete; maple floors; concrete foundation; metal doors; vault doors; steel sash and trim; wire glass; Sumner-Sollitt Co., Contr., San Antonio.

Tex., Graham—Wichita Falls & Southern Ry., Frank Kell, Mgr., Wichita Falls; \$30,000 union depot; T. S. Leake & Co., Constr., 608 S. Dearborn St., Chicago.

Schools.

Ala., Mobile—School Commissioners; Arlington School; \$33,592; 165x98 ft.; 9 rooms and auditorium; brick veneer; wood floors; concrete foundation; asphalt shingle roof; low pressure vacuum steam heat; A. H. Downey, Archt., 111 S. Franklin St.; Soudberg & Barr, Constr., 63½ St. Francis St.; Baerman Hugonot, contr. for knob and tube system of electric lighting.

Ga., Dalton—Board of Education; \$40,000 high school; 2 stories; 11 classrooms, domestic science room, locker and shower room, music room, laboratory, auditorium to seat 500; L. J. Barrett, Contr., Kingston.

Md., College Park—University of Maryland, Dr. A. F. Woods, Prest.; \$100,000 gymnasium, auditorium and armory and 40,000 stadium; former, 3 stories; brick, steel and terra cotta; auditorium to seat 1500; concrete stadium to seat 3500; Flournoy & Flournoy, Archts., 306 St. Paul St.; H. D. Watts Co., Contr., Munsey Bldg., both Baltimore.

Mo., Columbia—University of Missouri, Edw. E. Brown, Bus. Mgr.; \$112,064 hospital; 3 stories; Carthage stone and brick; tile roof; metal doors; terrazzo and linoleum floors; hot water heat; elevator; Jamieson & Spearl, Archts., Arcade Bldg., St. Louis; Simon Constr. Co., Contr., Columbia; Chas. Quinn Plumbing and Heating Co., St. Louis, contr. at \$15,062 for plumbing; Eichler Heating Co., St. Louis, heating, refrigerating and ventilating.

N. C., Colerain—School Board will erect \$40,000 building; 2 stories; brick; Walter Clark, Contr., Wilmington.

Tex., San Antonio—Harlandale School Dist. No. 40; \$18,216 building; brick; 130x68 ft.;

1 story; wood floors; concrete foundation; gravel roof; Adams & Adams, Archts., Gibbs Bldg.; F. A. Wilson, Contr., 632 Kayton Ave.; A. H. Schafer, plumbing.

Tenn., Harriman—Woman's Board of Home Missions of Presbyterian Church; \$50,000 combination dormitory, academic and administration buildings for Mission School for Girls; 2 stories and basement; brick and hollow fireproof tile; slate roof; maple and concrete floors; steam heat; electric lights; R. F. Graf & Sons, Archts.; Lynn A. Hayes, Contr., both Knoxville.

Va., Richmond—St. Catherine's School for Girls, Rev. E. L. Woodward, Dean, Dominion Trust Bldg.; \$75,000 building, Westhampton; 3 stories; 88x40 ft.; fireproof; brick, concrete and wood floors; steel columns; slate roof; low pressure steam heat; Hobart B. Upjohn, Archt., Grand Central Terminal, New York; Claiborne & Taylor, Constr., Richmond.

W. Va., Grafton—School Board; Fetterman and Keener Lane schools; Glenn & Murphy, Constr.

Stores.

Ga., Atlanta—Acme Construction Co., Chicago, G. H. Smith, Representative, 637 Canal St., New Orleans, has contract to remodel building, Whitehall and Alabama Sts.

Ky., Paintsville—Jas. Turner; \$25,000 building; 78x84 ft.; brick; Johns-Manville or Barrett roof; cement and hardwood floors; gas heat; metal ceilings. Address Eastern Lumber & Supply Co., Archt.-Contr., Louisa.

Ky., Paintsville—Sld Webb; \$10,000 building; 32x58 ft.; brick; Johns-Manville or Barrett roof; cement and hardwood floors; gas heat; metal ceiling. Address Eastern Lumber & Supply Co., Archt.-Contr., Louisa.

La., Baton Rouge—J. W. Bahlinger; \$50,000 building; 106x128 ft.; mill construction; Barrett roof; metal ceilings; plaster board; ornamental terra cotta; metal doors; wire glass; steel sash and trim; concrete floors; hand power elevator; Edw. Neld, Archt., Shreveport; Burkes & Haley, Constr., New Orleans.

La., New Orleans—United Cigar Stores, Inc., New York; remodel building, Rampart and Howard Aves., including front and fixtures, \$12,000; remodel building, Delta and Canal Sts., including fixtures, \$8000; alter building, Canal and Chartres St., \$4000; Acme Construction Co., Contr., Chicago, G. H. Smith, representative, 637 Canal St., New Orleans.

Md., Baltimore—Julius Gutman, 201-03 W. Lexington St.; \$10,000 addition; 44x49 ft.; 1 story; brick; slag roof; steam heat; Smith & May, Archts., Calvert Bldg.; Fraine Bros. & Haigley, Constr., 18 Clay St.

Mo., Kansas City—Federal Building Co.; 3-story buildings, 215-29 E. 9th St., for stores and shops; \$40,000; 49x115 ft.; brick; terrazzo floors; concrete foundation; gravel roof; McKecknie & Trask, Archt., Gloyd Bldg., B. L. Hoffman, Contr., Ridge Arcade Bldg.

W. Va., Kenova—Tri-State Wholesale Grocery Co. will erect building to replace structure lately noted burned; \$35,000; 3 stories and basement; brick; V. E. Taylor, Contr., 1443 Adams Ave., Huntington.

Theaters.

D. C., Takoma Park—Takoma Theater Corp., W. G. Platt, Prest.; \$130,000 motion picture theater at 4th and Butternut Sts.; Grecian Doric type; auditorium to seat 1000, community forum, 2 stores, 5 suites offices, etc.; roof supported by steel columns; indirect lighting; Jno. J. Zink, Archt.; Boyle Robertson Constr. Co., Contr., both Washington.

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MACHINERY, PROPOSALS AND SUPPLIES WANTED

Acid Resisting Filter.—Hudson Medicine Co., H. F. Minter, Mgr., Box 708 Hopewell, Va.—Prices on acid resisting filter.

Agitator or Mixing Machine.—Hudson Medicine Co., H. F. Minter, Mgr., Box 708 Hopewell, Va.—Prices on agitator or mixing machine.

Asbestos (Powdered).—Vermilion Ice & Cold Storage, Inc., A. Gools Secy., Kaplan, La.—To correspond with mfrs. of powdered asbestos.

Beams (Iron).—L. G. Giordano, Box 436 Fairmont, W. Va.—Iron beams of different sizes.

Boilers.—Robert P. Kehoe, 7 E. 42nd St., New York.—200 H. P. horizontal return tubular boiler at least 125 lbs. pressure, for Pennsylvania installation.

Boilers.—Beckerley & Trusler, 306 Stewart Bldg., (Mchy. Dealers), Baltimore, Md.—Two horizontal return tubular 150 H.P. boilers, 72-in. x 19 ft., must have 4-in. tubes; good condition for Western delivery.

Bottling Machine.—Hudson Medicine Co., H. F. Minter, Mgr., Box 708, Hopewell, Va.—Prices on bottling machine.

Bridge Construction.—Lafayette County Board of Supvrs., W. M. Woodward, Clk., Oxford, Miss.—Bids until Nov. 7 for following:

98-ft. bridge across Puscuss Creek at Killgore old mill, Beat 2.

132-ft. bridge across Ward Creek, near John Russell's, Beat 2.

100-ft. bridge on Yocona River levee at Fonden crossing, Beat 4; plans, etc. on file.

Bridge Construction.—Dunklin County, Drainage Dist. No. 36, Kennett, Mo.—Bids until Nov. 12 for 5 timber highway and one reinforced concrete weir bridge; C. E. Smith & Co., Engrs., 2073 Railway Exchange Bldg., St. Louis, or Liberty National Life Bldg., Cape Girardeau, Mo. (Lately noted bids until Oct. 4).

Bridge Construction.—State Highway Dept., Jefferson City, Mo.—Bids opened Oct. 30 for following bridges:

Iron County, on State road from Tronton northwestward; Federal Aid Project No. 107-A.

Sta. 105 plus 15, over Gum Spring Branch of Knob Creek; 40-ft. reinforced concrete arch, spandrell filled; 18-ft. roadway.

Sta. 250 plus 58, two 16-ft. reinforced concrete slab spans; concrete pile; 2 mass abutment abutments; 78-ft. roadway; wood floor.

Sta. 274 plus 6, over Flat Creek; two 12-ft. reinforced concrete slab spans; concrete pier; 2 mass concrete abutments; 18-ft. roadway.

Sta. 302 plus 55, over Charley Creek; 20-ft. reinforced concrete slab span; 2 reinforced concrete abutments; 18-ft. roadway.

Sta. 498 plus 83, over Branch of East Fork of Cedar Creek; two 24-ft. reinforced concrete deck girder spans; concrete pier; 2 reinforced concrete abutments; 18-ft. roadway.

Sta. 543 plus 70, over Cedar Creek; 40-ft. reinforced concrete arch; 18-ft. roadway.

Sta. 546 plus 95, over Townsenda Branch of Cedar Creek; 40-ft. reinforced concrete arch; 18-ft. roadway. S. M. Rudder, Div. Engr., Bristol Bldg., Webster Grove, Mo. (Lately noted.)

Bridge Construction.—Noxubee County, Board of Supvrs., Jno. A. Tyson, Chancery Clk., Macon, Miss.—Bids until Nov. 6 for wooden bridge over Gully on Macon and DeKalb road, about 1 mi. from Gholson; plans, etc., on file.

Bridge Construction.—Santa Rosa County Comms., Milton, Fla.—Bids until Nov. 14

to construct .573 mi. bridge over Yellow River on Milton-Camp Walton road, about 8 mi. from Milton within Florida National Forest; 4450-ft. untreated timber trestle; installation of two 80-ft. old steel spans over channel; plans, etc. on file or from U. S. Bureau of Public Roads, Bell Bldg., Montgomery, Ala.; C. H. Overman, County Engr.

Bridge Construction.—Mecklenburg County, Board of Supvrs., N. G. Smith, Supvr., South Hill, Va.—Bids until Oct. 30 for 161 ft. concrete and steel bridge across Meherrin River at Union Mills, Va.; superstructure, reinforced concrete slabs; alternate bids on concrete abutments and piers; 1-Beam girders; wood floor; also bids on reconstruction of old bridge, including rebuilding of foundation pens and construction of wood superstructure; plans, etc., on file and from State Highway Comsn., Richmond, Va.

Bridge Construction.—Tarrant County, Hugh L. Small, County Judge, Fort Worth, Tex.—Bids until Nov. 2 for construction of concrete bridges as follows:

Bridge over Fossil creek on State Highway No. 40 and grading .113 mi. roadbed, placing waterbound macadam base and 1-in. cold rolled asphalt surface on same.

Bridge over Walnut creek on State Highway No. 34, grading .096 and surfacing with bituminous macadam.

Bridge over Mary's creek on State Highway No. 10, grading .349 mi. surfacing with waterbound macadam base and 1-in. cold rolled asphalt surfacing; R. V. Glenn, County Engr.

Brick (Vitrified Paving).—Mugge Construction Co., Tampa, Fla.—To correspond with mfrs. of vitrified paving brick.

Building Materials, etc.—Wm. Lee Popham, Apalachicola, Fla.—Prices on canning factory building material and any modern labor saving devices in connection therewith.

Building Material.—Wm. MacDonald Construction Co., 428 Odd Fellows Bldg., St. Louis, Mo.—Sub-bids on \$64,500 postoffice at Alexandria, La. and prices on building materials.

Canning Machinery.—Wm. Lee Popham, Apalachicola, Fla.—Prices on canning machinery for figs and blueberries in development of 9000 acres.

Cap (Wood Fiber).—J. I. Gilbert, Manchester, Ga., Box 41.—To contract for mfr. of small wood fiber cap, in quantities.

Cars (Tank).—Pennsylvania Equipment Chestnut St., Philadelphia, Pa.—Number of 8000 and 6000 gal. tank cars for rental during months of Nov., Dec. and Jan. for transportation of molasses; also to lease 100 tank cars for one year from Feb. 1, 1923 to be used for fuel oil.

Cars (Gondola).—Pennsylvania Equipment Co. (Mchy. Dealers) Crozer Bldg., 1420 Chestnut St., Philadelphia, Pa.—To purchase about 200 second-hand 100,000 lb. capacity flat bottom steel gondola cars.

Compressing Machine (Hydraulic).—Vermilion Ice & Cold Storage, Inc., A. Coals, Secy., Kaplan, La.—Hydraulic compressing machine for mfr. of artificial slate for roofing.

Concrete Mixer.—Chesley Clements, Bloomfield, Mo.—Concrete mixer.

Cranes (Traveling).—See Steel Buildings, etc.

Curbing (Granite).—Mugge Construction Co., Tampa, Fla.—To correspond with mfrs. of granite curbing.

Drainage.—Upper Third Creek Drainage Dist. No. 1, Iredell County Comms., J. L.

Harris, Chrmn., Statesville, N. C.—Bids until Nov. 8 to construct drainage improvements, work consists of about 8 mi. ditch, containing 137,314.8 cu. yds. dirt, approx. 1000 cu. yds. rock; plans on file or with W. D. Alexander, Engr., Charlotte, N. C.

Drainage.—Comms. of Columbus County Drainage Dist. No. 2, Bolton, N. C.—Bids until Nov. 4 to remove 168,000 cu. yds. earth from main ditch between laterals D and G, by means of drag line; plans and specifications on file.

Electric Fixtures and Accessories.—Beach Electric Co., D. O. Willis, 829 1st St., Miami Beach, Fla.—Electrical goods for contracting business, also fixtures and accessories.

Electric Supplies, etc.—Sandhill Power Co., (Merchandise Dept.) Southern Pines, N. C.—Prices and catalogs from mfrs. and jobbers on electric supplies, fixtures, appliances, motors, etc.

Engine (Electric).—Duncan Machinery Co., (Mchy. Dealers) Box 265, Knoxville, Tenn.—Jobbers prices on Ball or Skinner engine with General Electric or Westinghouse generator that will generate not less than 200 H.P. electric power, can use little larger; immediate delivery.

Engines (Gas).—National Bank of Lumpkin, J. S. Morton, Prest., Lumpkin, Ga.—prices on gas engines.

Engine (Oil Burning).—R. P. Johnson, (Mchy. Dealers), Wytheville, Va.—Dealers prices on 15 or 20 H. P. kerosene or oil burning engine, portable or stationary; good second-hand condition.

Fish Hatcheries.—Wm. Lee Popham, Apalachicola, Fla.—Prices on fish hatcheries, and all kinds of materials and supplies incidental to fish culture.

Gas Lamps.—Board of Public Service of City of St. Louis, Mo.—Bids until Oct. 31 for furnishing, installing, maintaining and operating gas mantle lamps on streets of St. Louis for one or six yrs.; information on application.

Generator Set (Engine).—Robert P. Kehoe, 7 E. 42nd St., New York.—400 to 450 KW. direct current generator set, direct connected to engine.

Grinding Mills, etc.—E. G. Kimissis & Co., Boite Post 55, Athenes, Greece.—Small grinding mill to grind pumice stone in fine impalpable powder, also small mill to grind mixed metals (alloy's) consisting of silver, copper, zinc and tin; small 110 volt motor for the mills.

Handle Making Machinery.—J. H. Anderson, Camden, S. C., R. F. D. No. 4.—Prices on handle making mchy.

Heating Plant.—J. A. Northcott, Clk., Hertford County Comms., Winton, N. C.—Bids opened Oct. 23 to install heating plant for court house and county jail.

Horses and Props.—U. S. Engr. Office, Huntington, W. Va.—Bids until Nov. 20 to furnish and deliver horses and props for Ohio river dam, No. 32; further information on application.

Insulation (Refrigerator).—Walter B. Wooden, 4010 Belview Ave., Arlington, P. O. Baltimore, Md.—Prices on refrigerator insulation.

Joiner.—Beckerley & Trusler (Mchy. Dealers) 306 Stewart Bldg., Baltimore, Md.—Small bench joiner, good condition.

Kitchen & Dining Room Equipment.—John S. Scully, Jr., Winchester, Va.—Complete kitchen and dining room equipment for at least 100 guests.

Knitting Machines.—Vermilion Ice & Cold

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Storage, Inc.—A. Cools, Secy., Kaplan, La.—To correspond with mfrs. of knitting machines.

Labeling.—Hudson Medicine Co., H. F. Minter, Mgr., Box 708, Hopewell, Va.—Prices on labeling machines.

Levee Construction.—Winston County Bd. of Supvs., W. E. Dempsey, Prest., Louisville, Miss.—Bids until Nov. 6 to build levee on Lake road at Fox Branch and in valley west of Oak Grove church.

Loader (Portable).—Duncan Machinery Co. (Mchy. Dealers) Box 265, Knoxville, Tenn.—Jobbers prices on portable loader for loading ore from the ground up to a truck or wagon, driven with gasoline engine; good used machine; Conant preferred.

Locomotive.—Pennsylvania Equipment Co. (Mchy. Dealers) Crozer Bldg., 1420 Chestnut St., Philadelphia, Pa.—To purchase one consolidated type locomotive, weighing 100 tons, steam 180 lbs., driver about 50-in. overall.

Locomotive (Saddle Tank).—M. B. Parker, Chattanooga, Tenn.—To purchase 42-in. ga. saddle tank locomotive; first-class second-hand condition.

Lumber.—L. G. Giordano, Box 486, Fairmont, Ave. W. Va.—Lumber of various kinds.

Lumber.—Port Commrs., Suite 200, New Orleans Court Bldg., New Orleans, La.—Bids opened Oct. 26 to furnish 100,000 ft. B. M. creosoted lumber; as specifications covered by requisition ED-12,163; plans with Supvr. of Purchases, 1 Canal St.

Lumber.—Laurence P. Johnston, 311 Davidson Bldg., Washington, D. C.—Bids until Nov. 1 on lumber for residence.

Machine Shop Equipment.—G. E. Osborn, 433 Wabash Ave., Wichita, Kan.—To purchase equipment for machine shop for general repair work.

Metal Sash, Windows.—Walter B. Wooden, 4010 Belview Ave., Arlington, P. O. Baltimore, Md.—Prices on metal sash windows for dairy plant.

Mica.—J. W. Simpkins, 304 Terry Bldg., Roanoke, Va.—Data as to the different kinds of mica, its commercial value, etc.

Millwork.—Laurence P. Johnston, 311 Davidson Bldg., Washington, D. C.—Bids until Nov. 1 on millwork for residence.

Mining Machinery.—E. A. Rhoads, Prest.—Mgr., Red Low Coal Co., Iverdale, Ky.—Mining mchy. for 50 ton daily capacity mine.

Mirror Plant Equipment.—P. O. Box K, Mebane, N. C.—Machy. and equipment for mirror plant.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until Nov. 1 to furnish: Cast iron manifold headers; copper controller segments; copper and brass tubing; lead pipe; voltmeters; electric soldering irons; marine receptacle plugs; steel insulator pins; machine bolts; door checks; plumbers furnaces; tallow pots; brass screws; staples; chain shackles; brushes; cocoanut fibre; asbestos packing; pool room and bowling alley supplies; oars and cotton twine, etc. Blank forms and information (Circular 2302) on application to Panama Canal; Asst. Purchasing Agts. at Fort Mason, San Francisco, Cal.

Mixing (Fertilizer) Machinery Plant.—Pike County Sweet Potato Co., Troy, Ala.—To correspond with mfrs. of our dealers in fertilizer mixing machinery plant.

Motor (Electric).—Standard Electric Machinery Co. (Mchy. Dealers) 7 E. Hill St., Baltimore, Md.— $7\frac{1}{2}$ or 10 H.P., 3 phase, 60 cycle, 220 volts, squirrel cage motor, either 600, 720 or 900 RPM., specify dia. and face

pulley, rails and self contained compensator with NVR.

Motor.—See Grinding Mills, etc.

Motor (Slip Ring).—Standard Electric Machinery Co. (Mchy. Dealers) 7 E. Hill St., Baltimore, Md.—40 H. P. slip ring motor, 3 phase, 60 cycle 220 volts, 900 or 1200 R. P. M., give rails diameter and face pulley with drum and grids.

Nursery Stock, etc.—Wm. Lee Popham, Apalachicola, Fla.—Prices on nursery stock, power stump pullers, etc.

Office Supplies.—John G. Underwood, Portsmouth, Ohio.—To correspond with mfrs. of office supplies, view to representation.

Oil (Fuel).—Duval County Commrs., Frank Brown, Clk., Room 10 Court House, Jacksonville, Fla.—Bids until Nov. 1 to furnish 450 bbls. of fuel oil, (42 gals. to bbl.); specification on file.

Oyster Canning Equipment, etc.—Wm. Lee Popham, Apalachicola, Fla.—Prices on elevators, endless chain conveyors, endless belt carriers and lifters, automatic dumps and pick up for oysters and oyster shells, gasoline engines, kerosene engines, crude oil engines, canning outfit, etc.

Paper (Impression).—Dept. of Agricultural, Board of Awards, Washington, D. C.—Bids opened Oct. 24 to furnish f. o. b. shipping point, 15,000 reams (96,300 lbs.) impression paper, 5x15-in., white, wove or laid, soft finish.

Paving and Sewer Construction.—City Commissioners, Laurel, Miss.—Bids until Oct. 30 for street paving; 19,865 sq. yds. brick pavement; concrete foundation; 16,160 sq. yds. gravel surfacing; 20,243 lin. ft. combined curb and gutter; 3000 sq. yds. concrete sidewalk; 1357 lin. ft. sanitary sewers with all appurtenances; plans, etc. from City Clk. (Lately noted bids until Oct. 9).

Paving.—Dist. Commrs., Washington, D. C.—Bids until Oct. 27 to grade 44,500 cu. yds. streets; plans, etc. on file.

Paving.—Walter H. Taylor, 3rd., Director of Public Works, Norfolk, Va.—Bids until Oct. 27 to grade, curb and lay 5-in. concrete base on following: Sheldon Ave. from Corpore Ave. to Clay St.

Fauquier St. from Poplar to Berkeley Ave.
Frederick St. from Poplar to Berkeley Ave.
Grayson St. from Berkeley Ave. to Liberty St.; plans, etc. on file.

Paving.—A. R. Hunt, City Clk., Huntington, W. Va.—Bids until Nov. 4 to grade, curb and pave following:

5th Ave. west, from 3rd to 5th Sts.
2nd St. west, from 8th to 9th Sts.
Court St. from 8th to 9th Sts.; plans, etc. on file; A. B. Maupin, City, Engr. (Lately noted.)

Paving.—Earl B. Horner, Mayor, Burlington, N. C.—Bids until Oct. 27 for street improvements; 2400 sq. yds. concrete pavement; 7500 lin. ft. curb and gutter; 2000 cu. yds. decomposed granite or top soil; plans, etc. on file and from Ludlow Engineers, Burlington and Winston-Salem, N. C., after Oct. 23.

Paving.—R. W. Riggsby, City Mgr., Durham, N. C.—Bids until Oct. 27 to grade and pave 5000 to 15,000 sq. yds. sidewalks; 4-in. concrete in sidewalks and 6-in. concrete in driveways; plans, etc. from H. W. Kueffner, Director of Public Works.

Paving.—J. L. Morgan, Mayor, Pikeville, Ky.—Bids opened Oct. 23 for paving with concrete base and vitrified paving brick, and combined concrete curb and gutter, following: Cline, Steel, Sycamore, 2nd, 3rd, 4th, 5th and 6th Sts.; River-View Drive; Myra-

Barnes and Scott Aves.; plans, etc. from City Engr., First National Bank, Pikeville.

Paving and Water Works Construction.—I. G. Vass, City Mgr., Galax, Va.—Bids until Nov. 15 for 30,000 sq. yds. permanent type street paving, and constructing 250,000 gal. per day capacity water purification plant; plans, etc. from Carolina Engineering Co., Engrs., 412 Southern Bldg., Wilmington, N. C.

Paving.—C. W. Cameron, Mayor, Marietta, Okla.—Bids until Nov. 2 for 25,100 sq. yds. street paving; 16,200 lin. ft. curb and gutter; plans, etc. from Elrod Engineering Co., General and Const. Engr., Dallas, Tex.

Pipe, etc.—Ping Construction Co., Greensburg, Ky.—To purchase 18 and 24-in. reinforced concrete culvert pipe and some deformed bars, reinforced steel for state roads; must fill state requirements.

Pipe (Concrete, Culvert).—State Highway Dept., Columbia, S. C.—Bids until Nov. 4 to furnish and deliver reinforced concrete culvert pipe to contractors for use in road construction work to be let to contract by the department during months of Nov. and Dec. 1922 and Jan. 1923; pipe must conform to South Carolina state highway dept. specifications; further information on application.

Pipe (Vitrified Terra Cotta).—Board of Awards, Richard Gwinn, Register, City Hall, Baltimore, Md.—Bids until Nov. 1 to furnish and deliver vitrified terra cotta sewer pipe to Highways Engr.; specifications on application to A. E. Christliff, Highway Engr., Room 8, City Hall.

Plastering.—Laurence P. Johnston, 311 Davidson Bldg., Washington, D. C.—Bids until Nov. 1 for plastering residence.

Plate Glass.—L. G. Giordano, Box 486, Fairmont, W. Va.—Plate glass for show windows.

Printing.—State Printing Board, New Orleans, La.—Bids until Nov. 6 for printing of advertisements, public notices, proclamations, and all stationary, printing paper, etc. used by State of Louisiana.

Refrigerating Equipment.—Wm. Lee Popham, Apalachicola, Fla.—Prices on general equipment.

Refrigerating Outfit.—Walter B. Wooden, 4010 Belview Ave., Arlington, P. O. Baltimore, Md.—Prices on 10 to 12 ton refrigerating outfit for dairy plant.

Re-roofing.—Treasury Dept., Snvpy. Archt. Office, Washington, D. C.—Bids until Nov. 17 for re-roofing of buildings and structures as listed, for U. S. Marine Hospital (National Home for Lepers) Carville, La.; specifications on file.

Road Building Materials.—Hillsboro County Commrs., Charles T. Friend, Chrmn., Tampa, Fla.—Bids until Nov. 17 on road building materials, including brick, asphalt block, sheet asphalt, asphaltic concrete, cement concrete or bituminous macadam, for 160 mi. road building.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids until Oct. 27 for 1.004 mi. State road from Fulton westward; gravel pavement; Callaway County, Federal Aid Project No. 218; R. W. Hodson, Div. Engr., Jefferson City, Mo.

Road Construction.—State Road Comsn., E. S. Carskadon, Secy., Charleston, W. Va.—Bids until Nov. 14 to grade, drain and pave .6 mi. Simmons-Freeman road; bituminous macadam; Mercer County; Project No. 3080-A; plans, etc. on file, or from Div. Engr., Huntington, W. Va.

Road Construction.—Palm Beach County Commrs. Hector Harris, Chrmn., West Palm Beach, Fla.—Bids until Nov. 1 to re-

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surface with rock, 3 mi. Boynton West road, commencing at Dixie Highway in Boynton; plans, etc., from County Engr.

Road Construction.—Lake County Comms., H. R. Ferran, Chrmn., Tavares, Fla.—Bids until Nov. 9 to grade, drain and surface with sand-clay 10.3 mi. Lake Shore Drive road, No. C-D, in East Lake County Special Road and Bridge Dist., between Eustis and Tavares and Mount Dora; plans, etc., from T. C. Smyth, County Clk., or Geo. E. Heller, County Engr.

Road Construction.—State Highway Dept., Geo. S. Matthews, County Judge, Austin, Tex.—Bids opened Oct. 31 to surface 3.98 mi. State Highway No. 20 with 1½-in. bituminous topping; involving 28,183.3 sq. yds.; O. Leonard, County Engr.

Road Construction.—State Highway Dept., Nashville, Tenn.—Bids until Nov. 10 for following:

9.8 mi. 18-ft. road between Newport and North Carolina State line; Cocke County, Federal Aid Project No. 23. (Lately noted.)

4.8 mi. 18-ft. road between Jacksboro and Lafollette; Campbell County, Federal Aid Project No. 37, Sec. B; plans, etc., from D. Q. McComb, Ch. Engr., State Highway Dept.

Road Construction.—State Road Comsn., Charleston, W. Va.—Bids until Nov. 14 for grading and draining following:

Boone County, 4 mi. Ramage-Madison road.

Boone County, 1.7 mi. Racine-Peytona road.

Raleigh County, 4.2 Shady Springs-Flat Top road; bituminous macadam paving.

Pocahontas County, 4.23 mi. Buckeye-Millpoint road.

Nicholas County, 5.7 mi. Summersville-Gilboa road.

Summers County, 4. mi., 1967 to Raleigh County line.

Clay County, 4.6 mi. Mayshell road toward King Shoals road.

Mason County, 9 mi. Pt. Pleasant-Clifton road; gravel surfacing.

Mason County, 5.5 mi. Henderson, Couch road; gravel surfacing.

Wayne County, 3.63 mi. Echo-Fleming road.

Wyoming County, 3.63 mi. Iroquois-Amigo road.

Raleigh County, .54 mi. Iroquois-Amigo road.

Calhoun County, 11 mi. Grantsville-Arnoldsburg road.

Wirt County, 12 mi. Elizabeth-Spencer road.

Webster County, 11 mi. Pt. Mountain-Randolph road.

Gilmer County, 10 mi. Glenville-Norman-town road.

Upshur County, 6 mi. Buckhannon-Randolph road.

Grant County, 2.4 mi. Petersburg-Hardy County line road; waterbound macadam.

Hampshire County, 8.6 mi. Junction to Hardy County line.

Mineral County, 7.6 mi. Ridgeley-Alaska road; gravel surfacing.

Road Construction.—Hillsborough County Comms., Chas. T. Friend, Chrmn., Tampa, Fla.—Bids until Nov. 17 to pave 160 mi. 9 and 15-ft. roads; brick, asphalt block; sheet asphalt; asphaltic concrete; cement concrete or bituminous macadam; plans, etc., on file.

Road Construction.—Sumter County Commissioners, Bushnell, Fla.—Bids until Nov. 14 for 12 mi. asphalt paving; E. V. Camp and Associates, Engrs., Moreland & DeKalb Aves., Atlanta, Ga.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids until Oct. 30 to grade, construct culverts and surface 1.5 mi. State road from Missouri-Kansas line to Minden Mines; Ray Dunlap, Div. Engr., Frisco Bldg., Joplin, Mo.

Road Construction.—State Road Comsn., Charleston, W. Va.—Bids until Nov. 14 to grade, drain and pave with waterbound macadam 4.24 mi. Martinsburg-Hedgesville road; Berkeley County, Federal Aid Project No. 302S; plans, etc., from E. Gray, Div. Engr., Keyser, W. Va.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids opened Oct. 20 for following:

Iron County, .975 mi. State road from Ironton northwestward; bituminous macadam pavement; Federal Aid Project No. 107-B.

Iron County, 11.260 mi. State road from Ironton northwestward; 12-ft. wide gravel and 16-ft. wide bituminous macadam pavement; Federal Aid Project No. 107-A; S. M. Rudder, Div. Engr., Bristol Bldg., Webster Grove, Mo.

Grundy County, .572 mi. State road from Jamesport to Trenton; State Aid Project No. 20,170; C. P. Owens, Div. Engr., Howe Bldg., Macon, Mo.

Dade County, 4.029 mi. State road from Lamar to Springfield; gravel pavement; Federal Aid Project No. 159-A; Ray Dunlap, Div. Engr., Frisco Bldg., Joplin, Mo.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids opened Oct. 26 for 4.507 mi. State road from Ozark southward; State Aid Project No. 20,213, H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo. (Lately noted.)

Road Construction.—State Highway Comsn., Montgomery, Ala.—Bids until Nov. 14 for following:

Surface 5.6 mi. road between Huntsville and Guntersville; Marshall County, Federal Aid Project No. 40; 39,424 sq. yds. double surface treatment.

Surface 6 mi. road between Huntsville and Scottsboro, Jackson County, Federal Aid Project No. 40; 42,240 sq. yds. double surface treatment; plans etc. on file and from Div. Engr., Decatur, Ala.

Road Construction.—Van Zandt County Court, Chas. L. Hubbard, County Judge, Canton, Tex.—Bids until Oct. 26 for 47 mi. gravel road on State Highway No. 15; plans, etc. on file and from F. W. Gaines, County Engr.

Road and Bridge Construction.—Dorchester County Highway Comsn., St. George, S. C.—Bids until Nov. 9 for 4 mi. State road between Dorange and Reevesville; 9800 cu. yds. sand clay surfacing; also construct reinforced concrete bridge; five 22-ft. bents; 150 cu. yds. Class A concrete; 29,000 lbs. reinforcing steel; Federal Aid Project No. 194; plans, etc. from State Highway Engr., Columbia, S. C.

Road and Bridge Construction.—Richland County Permanent Roads Comsn., John J. Earle, Secy., Arcade Bldg., Columbia, S. C.—Bids until Nov. 1 for 11.15 mi. Monticello road, beginning at Sta. O in Eau Claire and ending just north of Cedar Creek; 33,000 cu. yds. gravel or top soil surfacing; 138,819 lbs. steel reinforcing; also construct 146-ft. reinforced concrete bridge over Crane Creek, and 22-ft. reinforced concrete bridge over Cedar Creek; plans, etc. on file.

Road and Bridge Construction.—Levy County, Board of Bond Trustees, Special Road and Bridge Dist. No. 3, E. H. Yearly, Secy., Otter Creek, Fla.—Bids until Nov. 18 to grade 18 mi. road, and construct wooden bridges of various lengths; plans, etc. on file or from D. Frazier Thomas, Engr., Cedar Key, Fla.

Roof Covering.—Walter B. Wooden, 4010 Belview Ave., Arlington, P. O. Baltimore, Md.—Prices on roof covering for dairy buildings.

Sand and Stone Chips.—Corkstone Products

Corp., Albert Rankin, Prest., 119 N. Collington Ave., Baltimore, Md.—White clean sand and stone chips used for stucco dash.

Saw (Band).—Beckerly & Trusler (Mchy. Dealers) 306 Stewart Bldg., Baltimore, Md.—Adjustable with tilting table, 26 to 30-in. band saw, good condition.

Scrapers (Wheel).—John B. Nabers, Box 1024, Vernon, Tex.—Wheel scrapers for 11½ mi. concrete paving.

Sewer Material.—City of Jacksonville, Fla., E. P. Owen, Secy.—Bids until Nov. 2 for furnishing following materials f.o.b. in connection with proposed construction of storm water and sanitary sewers; approx. 32,719 ft. of from 12" to 54" R. C. pipe; 1000 6"x5" T.C. Y's; 10 6"x6"x5" C. I. Y's 48"x55" C. I. Y's; plans and specifications obtained from office of City Engr., Engineer Bldg.

Sewer, Sewage Disposal and Water Plant.—City of Lubbock, Tex., Percy Spencer, Mayor—Bids until Nov. 3 for furnishing all necessary materials, equipment and labor for constructing sewer, sewage disposal and water line system; plans etc. from J. R. Germany, City Secy.; John B. Hawley, Consult. Engr., Ft. Worth.

Socks.—Depot Quartermaster, U. S. M. C., 1109 S. Broad St., Philadelphia, Pa.—Bids until Oct. 31 for 94,000 prs. woolen socks, spec. 5584a and 100,000 prs. natural white, cotton socks; further information on application to Room 3207, Navy Bldg., 18th and B Sts., N. W. Washington, D. C. or 1100 S. Broad St., Philadelphia.

Steam Plant.—Duncan Machinery Co. (Mchy. Dealers) Box 265, Knoxville, Tenn.—Jobbers prices on complete steam plant with 150 or larger boilers for high pressures, with engine and generator in first-class condition, to develop not less than 200 H.P.; state location, condition, lowest jobbers price.

Steel Barge.—U. S. Engr. Office, Montgomery, Ala.—Bids until Dec. 1 for one 60x26x5-ft. steel barge.

Steel Building, etc.—International Steel & Iron Co., Evansville, Ind.—To purchase good second-hand building, 75 to 90-ft. wide and 550 to 600-ft. long, to be used as structural steel warehouse and fabricating shop, also purchase in connection herewith a 10 to 20 ton capacity traveling crane; principally interested in the steel frame work, including columns, trusses, bracing and crane girders; state price, tonnage, dimensions, capacity of supporting members, etc.; would consider a bid f.o.b. cars also consider dismantling structure.

Stone (Broken).—S. H. Cain, Liberty County Judge, Liberty, Tex.—Bids opened Oct. 24 to furnish 625 yds broken stone that will pass 2-in. ring and 85 per cent which will be retained on a ¼-in. screen, having a French coefficient of wear of not less than 10; also 1700 yds. mud shell not more than 10 per cent mud.

Stone (Crushed), etc.—State Highway Dept., Geo. S. Matthews, County Judge, Austin Tex.—Bids opened Oct. 31 for 4602.8 cu. yds. stone to be crushed, hauled and rolled on about 4 mi. State Highway No. 2 in Travis County between Austin and Manor; O. Leonard, County Engr.

Structural and Tank Steel.—Port Comms. Suite 200, New Court Bldg., New Orleans, La.—Bids until Nov. 9 to furnish and erect approx. 265 tons structural and tank steel required for the grain elevator sacking plant shed and bins; specification with Suprv. of Purchases, 1 Canal St.

Sweeper (Street).—Town of Southern Pines, N. C., R. L. Chandler, Clk.—To purchase street sweeper, brooms, etc. for paved streets.

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Textile Machinery.—Herbert Stanley, Secy., Chamber of Commerce, Greenville, Miss.—Data and prices on mchy. for mfrs. of cotton rope and cotton bags; to correspond with mfrs. or dealers.

Tractors.—Wm. Lee Popham, Apalachicola, Fla.—Prices on tractors for clearing land on 9000 acres.

Tractors.—National Bank of Lumpkin, J. S. Morton, Prest., Lumpkin, Ga.—Prices on tractors.

Turbine (Steam).—P. O. Box 853, Seattle, Wash.—500 KW and 1500 KW condensing steam turbine complete, 125 to 150 lbs. gauge, 3 phase, 60 cycle, 2300 volts. consider capacity in one unit; state condition and price.

Turbo Generator Set.—Standard Electric Machinery Co., (Mchy Dealers) 7 E. Hill St., Baltimore, Md.—Prices on 300 to 600 KW. 2 wire D. C. 220 volt generator to turbine for 120 lbs. steam O. S. H. and 26-in. vacuum with or without balancer also switch board; to operate non-cond. at times and reduced capacity with 2 lbs. gauge back pres.; specify original economy; also surface condenser to go within 8 ft. head room.

Uniforms (Police Dept.).—Police Commrs., Josiah A. Kinsey, Secy., Room 13, Court-house, Baltimore, Md.—Bids until Dec. 5 to furnish uniforms for members of police department for term of two years, from Jan. 1, 1923; specifications on file.

Water Supply System.—City of Front Royal, Va., B. J. Hillidge, Mayor.—Bids until Nov. 2 for constructing two water lines; plans, etc. obtainable from Mayor or Council or from F. M. Richey, City Engr.

Water Works Equipment.—City of Miami, Fla., Frank H. Wharton, Mgr.—Bids until Nov. 7 for furnishing: motor driven sewage screen, including motors and necessary equipment, capacity 2100 gals. per minute; 2 motor driven centrifugal pumps, including motors and necessary equipments capacity 2100 ft. gas. per minute against total head of 30 ft.; 400 ft. of 16-in. Class B. cast iron pipe; plans, etc. obtainable from Chas. W. Murray, Director of Public Service.

Water Works.—Town of Elkton, Va., C. W. McGuire, Treas.—Invites correspondence on installation of water works system, cost \$75,000.

Water Works Improvements.—City of Laurens, S. C., Stanley W. Crews, City Clk.—Bids until Nov. 2 for the following water works improvements: mechanical filtration plant of reinforced concrete with daily capacity of 1,000,000 gals. together with all necessary piping, valves, etc.; reinforced clear water basin of 525 gals. capacity; raw water station and intake; furnishing and laying approx. 100 tons of B. & S. cast iron pipe; furnishing and installing two 1250 gal. per minute motor driven centrifugal service pump and two 750 gal. per minute raw water pumps; plans etc. on file with City Clk. and with Wm. M. Platt, Engr., Durham, N. C.

Water Supply and Fire Protection System.—City of Norfolk, Va., Chas. B. Ashburner, City Mgr.—Bids until Nov. 2 for construction of water supply and fire protection system in connection with grain elevator now being erected by city at Municipal Terminals on Elizabeth River; plans, etc. may be obtained from Chicago office of Folwell-Abiskog Co., 323 N. Michigan Ave., Norfolk or from office 600 Seaboard Bank Bldg.

Wire (Poultry and Hog).—National Bank of Lumpkin, J. S. Morton, Prest., Lumpkin, Ga.—Prices on poultry and hog wire.

Woodworking Machinery.—Blitwell Factories, C. W. Rogers, Mgr., 1414 Washington, Ave., Wichita, Kan.—To purchase drill press, lathe and other woodworking mchy.

Financial News

New Financial Corporations.

D. C., Washington—The Merchants Bank and Trust Co. will open branch in Brookland with J. L. Sherwood, Manager.

Fla., Tarpon Springs—First National Bank, capital \$50,000, inceptd. with Chas. H. Brown, Prest.; Ernest Meres, Vice-Prest.; J. C. McCracklin, Cashier. (Lately noted.)

Fla., West Palm Beach—The Citizens Bank, capital \$100,000, inceptd. with B. A. Mac field, Prest.; L. S. Watkins, Vice Prest.; E. C. Rumsey, Cashier.

Ky., Hopkinsville—The Invincible Fire Insurance Co., capital \$100,000, organized.

Ky., Frankfort—Phoenix Indemnity Co., capital \$150,000, organized.

Md., Baltimore—Zagerer Building and Loan Assn., capital \$50,000, inceptd. by Tanchin Oshrin, Louis Klavens and Harry Heyman.

Md., Baltimore—The Southwestern Building and Loan Assn., 346 Equitable Bldg., capital \$100,000 inceptd. by Samuel S. Peters, William Schmidt, Waller F. O'Loughlin, and others.

Md., Baltimore—The Paramount Building and Loan Assn., 346 Equitable Bldg., capital \$100,000 inceptd. by Adolph Weiner, Henry DeBeer, Dr. Samuel Weinberg, and others.

Md., Cumberland—Merchants Finance Corp., capital \$500,000, inceptd. by Hugh A. McMullen, Jr., Henry A. Mackey and Richard F. McMullen.

Mo., Jefferson City—The Bank of Iron-ton, capital \$15,000, reopened with increased capital.

Mo., Kansas City—W. H. Richards & Co., inceptd. by W. H. Richards, W. H. Launder, George Heath, W. J. Crangle and R. S. King.

Mo., St. Louis—Missouri Bldg. and Loan Assn., capital \$1,000,000, Directors; Chas. E. Hannauer, Sam Neier, Harry J. Reker, A. E. Todt, Fred A. Collier, and others.

N. C., Burlington—Morris Industrial Bank organized with J. M. Fix, Mgr. and Cashier.

N. C., Charlotte—The Carolina Homes and Investment Co., capital \$350,000, renewed charter, R. S. Motte, Prest.

S. C., Columbia—The Industrial Loan & Investment Corp., inceptd. by L. A. Griffith, Geo. Nafey and E. J. Best.

S. C., Columbia—The National Loan and Exchange Bank, received extension of charter.

Tenn., Memphis—Falls & Co., capital \$50,000, inceptd. by J. W. Falls, L. D. Falls, Ray Duncomb, W. P. Maury and N. F. Austin.

Tenn., Nashville—The Central National Bank of Nashville, merged with the Central Bank & Trust Co., Watkins Crockett, Prest.

Va., Berryville—Berryville Building Assn., capital \$40,000, inceptd. with Thomas Jones, Prest.; H. M. Hardesty, Secy. and Treas. (Lately noted.)

Va., Goochland—The Bank of Goochland, capital \$25,000, inceptd. with Thomas P. Delrick, Prest., Frank W. Brown, Secy.

Va., Norfolk—H. S. Rawlings and Co., capital \$50,000, inceptd. with H. S. Rawlings, Prest.; E. M. Jones, Secy.; F. W. Strudwick.

New Securities.

Ala., Gadsden—Indebtedness—Etowah

County will vote November 7, on \$125,000, 6% bonds. (Lately noted.)

Ala., Mobile—Paving—City, R. V. Taylor, Mayor receives bids until Nov. 13 for \$3300, 5%, \$300 denom. bonds.

Ala., Tuscaloosa—Fire Dept.—Bd. of Commrs. D. B. Robertson, Prest. sold \$18,000, 5%, \$1000 denom. bonds to N. L. Hill & Co., Cincinnati.

Ark., Little Rock—Road—Chairman of the Board of Commissioners, Pulaaki County receives bids until Oct. 30 for \$1,750,000, 5½% bonds.

Ark., Russellville—Road—The National Bank of Commerce, St. Louis, purchased \$307,000, 6%, \$1000 denomination bonds.

Fla., Chipley—Streets—City Council sold \$21,800 6% bonds to the Chipley State Bank with accrued interest.

Fla., Dade City—Road—City receives bids until Nov. 6 for \$500,000 bonds. Address The Mayor.

Fla., Ft. Pierce—Ditch—St. Lucie County sold \$500,000, 6%, bonds to J. L. Arlitt, Austin. Address County Commrs.

Fla., Groveland—School—City sold bonds to Bank of Groveland.

Fla., Hewey—School—City sold bonds to Bank of Groveland. Address the Mayor.

Fla., Inverness—Road—Citrus County will vote soon on bonds. Address County Commissioners.

Fla., Miami Beach—Sewers, Streets and Sidewalk—The First National Bank purchased \$218,000, 6% bonds.

Fla., St. Petersburg—Fire Station, Park, Warehouse, Hospital, Playground, Bridges, Drainage, Incinerator, Paving, and Widening—City will vote Dec. 5 on \$1,048,000 bonds. Address The Mayor.

Fla., West Palm Beach—Canal—Richard A. Ellis, Fla. Rep. for J. L. Arlitt, 60 Wall Street, New York purchased \$196,000 bonds from the Highland Glades drainage dist.

Ky., Ashland—Water—City sold \$90,000, 4½% bonds to Richards, Parish & Lamson, Cincinnati. Address The Mayor.

Ky., Pineville—Road—City will vote Nov. 7 on \$400,000 bonds. Address The Mayor.

Ky., Salyersville—Road—The Salyersville National Bank purchased \$37,500, 5% bonds.

Ky., Whitesburg—Road—Caldwell & Co., Nashville, purchased \$300,000, 5% bonds at par.

La., Donaldsonville—Levee—Bd. of Commrs. of Lafourche Basin Levee Dist. sold \$500,000 bonds to the Bank of Baton Rouge at par and accrued interest.

La., Gretna—School—George A. Cox, Prest., Bd. of School Directors receives bids until Nov. 18 for \$400,000, 5%, \$1000 denom. bonds.

La., Monroe—Road—Richland Parish police jury receives bids until Nov. 7 for \$70,000, 6% bonds of Road Dist. No. 1.

La., New Iberia—Paving—City sold \$145,000 bonds to L. E. French & Co., Alexandria.

La., New Orleans—County House—Sutherland, Barry & Co., purchased \$150,000 bonds from Bolivar County, Miss.

La., Rayville—Road—The Police jury of Richland parish will receive bids until Nov. 7 for \$70,000, 6% bonds for Road Dist. No. 1, J. C. Salmon, Clk.

Md., Brunswick—Water and Street—City, E. C. Shafer, Mayor sold \$30,000, 5%, \$1000 denom. bonds to Bank of Brunswick.

Miss., Columbus—School—The New Hope Consolidated School Dist. voted \$20,000 bonds.

Miss., Hattiesburg—School—Bd. of Supvrs. receives bids until Nov. 10 for \$50,000, 6% bonds. Herbert Gillis, Chancery Clk.

Miss., Hazlehurst—Road—Copiah County,

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Bd. of Supvrs., Dist. 5, will vote on \$25,000 bonds. (Lately noted.)

Miss., Jackson—Road—City, Walter A. Scott, Mayor, sold \$47,000 bonds to Caldwell & Co., Nashville.

Miss., Jackson—The State Bond and Improvement Comm. sold \$1,000,000 bonds to the Jackson State National Bank and the Hibernia Securities Co., New Orleans. (Lately noted.)

Miss., Leland—Water—City sold \$14,000, 5½% bonds to Bank of Leland. Address The Mayor.

Miss., Magnolia—School—The Mayor and Bd. of Aldermen sold \$11,000 bonds at par and accrued interest to C. D. Miller.

Miss., Yazoo City—Water, Light and Sewer—City Clk. E. G. Olden receives bids until Nov. 13 for \$150,000, 6% bonds.

Missouri—Road—Watkins & Co., Hornblower & Weeks and others of New York purchased \$5,000,000, 4½% bonds from the State.

Mo., Cameron—School—City will vote Nov. 7 on \$80,000 bonds. Address The Mayor.

Mo., Lafayette—Road and Bridge—City sold \$258,000, 5% bonds to W. R. Compton Co., St. Louis. Address The Mayor.

Mo., Milan—Light and Water—The Guaranty Trust Co., Kansas City, purchased \$45,000, 5%, \$1000 or \$500 denom. bonds.

N. C., Asheville—School—Haw Creek, Frank Wells, Supt., voted \$50,000 bonds.

N. C., Elizabeth City—Public Utility—Bd. of Aldermen receives bids for \$300,000 bonds.

N. C., Fountain—Light—Bruce Craven, Trinity, purchased \$15,000, 6%, \$500 denom. bonds.

N. C., Gastonia—School—Graded School Dist., R. C. Patrick, Secy. Bd. receives bids until Oct. 30 for \$150,000 \$1,000 denom. bonds, interest not to exceed 6%.

N. C., Griffiths—Road—Road Comm. J. N. Taylor, Chrmn. receives bids until Nov. 6 for \$10,000, 6%, \$1,000 bonds.

N. C., Hillsboro—Street—City, T. M. Arrasmith, Mayor, voted \$60,000 bonds.

N. C., Nashville—Road—J. N. Taylor, Chrmn., receives bids until Nov. 6 for \$10,000, 6%, \$1000 denom. bonds.

N. C., New Bern—Water, School and Improvement—Bd. of Aldermen, F. T. Patterson, City Clk., receives bids until Oct. 31 for \$100,000 water, \$30,000 school and \$305,000 public improvement bonds, interest not to exceed 6%, \$1,000 denom.

N. C., Winterville—Light and Improvement—City sold \$10,000, 8% bonds to George & Fether of Cherryville. Address The Mayor.

Okla., Duncan—Road—Stephens County voted \$800,000 bonds. Address County Commrs. (Lately noted.)

Okla., Goltry—Light—City voted \$15,000 bonds. Address The Mayor.

Okla., Madell—Waterworks—City sold \$41,000, 6% bonds to The Brown-Crummer Co., Wichita. Address The Mayor.

Okla., Norman—Municipal—City, Jos. Hair, Clk. receives bid until Oct. 24 for \$100,000, 5½ and 6% bonds.

Okla., Wynena—School—City voted \$6000 bonds. Address The Mayor.

S. C., Anderson—School—Bd. of Trustees School Dist. No. 3, John C. Pruitt, will vote Oct. 26 on 6% bonds.

S. C., Clover—Sewer and Water—Town, John A. Jackson, Supervisor, will vote Oct. 24 on \$65,000 bonds.

S. C., Mullins—School—Mullins School Dist. sold \$45,000 bonds with accrued interest to Sidney Spitzer & Co.,

S. C., Sumter—Paving—City sold \$100,000 bonds to Hibernia Securities Co. Address The Mayor.

Tenn., Memphis—Water, Sewer, Hospital, Street, Terminal and Warehouse—City will issue \$2,961,000 bonds. C. C. Pashby, Clk.

Tenn., Shelbyville—Street—City, H. B. Cowan, Mayor, receives bids until Oct. 20 for \$50,000, 5½%, \$1000 denom. bonds.

Tenn., Waverly—The Citizens Bank of Waverly purchased \$16,000, 6%, \$1000 denom. bonds.

Tex., Bonham—School—Fanniss-Hunt County School, King Dist. No. 5, issued bonds.

Tex., Brownwood—Road—Brown County Commrs. will call election on \$1,185,000 bonds probably Nov. 18.

Tex., Bryan—Paving—Halsey, Stuart & Co., Inc., Chicago, purchased \$32,000 bonds at par and accrued interest.

Tex., Cameron—Sewer—City voted \$14,000, 6% bonds.

Tex., Canton—Light—City, Lamar Sides, Secy., will vote Oct. 31 on \$16,500, 6% bonds.

Tex., Corpus Christi—Wharfage and Terminals—City will vote Oct. 31 on \$1,000,000 bonds. Address Port Development Assn.

Tex., Galveston—School and Paving—Bd. of City Commrs. receives bids for \$1,120,000 bonds.

Tex., Galveston—Refunding and School—City Commrs. sold \$600,000 refunding bonds to the Texas Bank and Trust Co. and \$520,000 school bonds to Breg, Garret and Co., Dallas, Deeman, Mayor.

Tex., Henrietta—Road—Clay County Road Dist. sold \$80,000 bonds at par and accrued interest.

Tex., Jourdan—Cattle Tick—Atascosa County, W. H. Hill, Judge, sold \$30,000, 6%, \$500 denom. bonds to Security Trust Company, Austin. (Lately noted.)

Tex., Mason—Road—Mason County Road Dist. No. 2 votes Nov. 4 on \$9000, 5½% bonds.

Tex., Navasota—Paving—City voted bonds.

Texas—Road—Matagorda County Commrs. Court, will vote on bonds as follows:

Bay City, Nov. 23 on \$2,000,000. (Lately noted.)

Matagorda, Gulf and Wadsworth, Nov. 18 on \$110,000.

Territory covered by Wadsworth and Hawkins ranches, Nov. 27 on \$5000.

Tex., Wichita Falls—Hospital—County Commrs. will vote Nov. 21 on \$150,000 bonds.

Va., Fairfax—Road Fairfax County will vote Nov. 7 on \$275,000 bonds. Address County Commrs. (Lately noted.)

W. Va., Gary—School—Adkin School District, McDowell County will vote Nov. 7 on \$150,000, \$1000 bonds.

W. Va., Princeton—School—Mercer County, Rock Dist. Bd. of Education will vote on \$100,000 bonds Nov. 7. J. M. Crozier, Prest.

W. Va., Weston—Road—Lewis County Commrs. will vote on \$800,000 bonds.

Financial Notes.

Ky., Louisville—Avery Building and Loan Assn. increased capital.

Ky., New Port—Kentucky Loan and Building Assn. increased capital to \$6,000,000.

The statement of the Bank of Baton Rouge, Baton Rouge, La., as to condition September 15, 1922, shows total deposits of \$5,056,950.52 and total resources of \$5,825,702.78. The total

of capital, surplus and profits was \$655,752.28, surplus earned being \$300,000 and undivided profits \$94,595.99.

N. C., Salisbury—Morris Plan Bank is doubling capital to \$100,000.

Va., Ashland—The Hanover Bank, will increase capital to \$28,000, S. J. Doswell, Prest.; W. L. Foy, Secy.

Va., Gloucester—Bank of Gloucester increased capital to \$100,000.

Va., Norfolk—Norfolk Home Building and Loan Assn. increased capital to \$300,000, Samuel L. Tucker, Prest., C. C. Dugan, Secy.

Trade Literature.

Wire Rope Accessories.

The Broderick & Bascom Rope Co., of St. Louis, with eastern office at 76 Warren St., New York, has issued a circular illustrating a number of many wire rope accessories carried in stock for users of their products which include the well known "Yellow Strand Powersteel" rope, besides wire rope for every purpose.

Boiler Settings, Chimneys, Towers, Etc.

Ballard Sprague & Co., Incorporated, 200 Fifth Ave., New York, have issued a fine booklet describing and illustrating their construction service, including boiler settings, chimneys, brick linings for steel stacks, foundations for power units, construction of reinforced concrete acid towers and tanks, etc. The pictures in this publication are of a superior character, accurately showing the work done at various plants, the accompanying reading matter being full of valuable information.

Important Business Announcement.

The Roberts Filter Manufacturing Co., of Darby, Pa., are now exclusive manufacturers and distributors of the Bannon Transport Chemical Dissolver. This apparatus, designed for dissolving and feeding alum in filtration plants, eliminates the work of elevating the chemical above the ground floor. Water under pressure is the only power employed in its operation. A large installation is now under way in the municipal filtration plant at Kansas City, Kans. Printed matter relative to this apparatus will be sent on request.

Prize Contest Announced.

The Erie Steam Shovel Co., Erie, Pa., expects to render a real service to all owners of excavating equipment by gathering many actual maintenance cost records and publishing them in detail. To secure these actual records they have just announced a prize contest for the best up-keep records. There are 20 prizes, ranging from \$100 and a Waltham watch for the first prize and \$50 and a Waltham watch for the second prize, down to \$5 for the twentieth prize. In addition to this \$5 will be given for every record which does not win a prize, if it is published. The judges will be Arthur S. Bent, of Bent Brothers, contractors, Los Angeles, Calif.; Halbert P. Gillette, editor of "Engineering and Contracting" and author of the "Handbook on Excavation Costs;" and A. C. Vicary, vice-president of the Erie Steam Shovel Co., a mechanical engineer of many years of specialized experience on steam shovel work. The contest is now open and continues until December 31. Complete information concerning it can be secured from the company.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers, or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Sales Manager Appointed.

C. R. Dodge, well known throughout the construction and contracting field, has become sales manager of the Northwest Engineering Co., Green Bay, Wis., manufacturers of crawler cranes, draglines, shovels, and similar equipment, with general sales office at 28 East Jackson Boulevard, Chicago, Ill. Mr. Dodge was formerly with the Lake-wood Engineering Co., as western sales manager, having been associated with that company since 1917 and prior to that time with the Milwaukee Concrete Mixer Co., handling contractors' equipment in New York City under the name of C. R. Dodge & Co. W. W. Mutter, vice-president of the Northwest Engineering Co., who formerly managed its sales organization is now paying attention to production and special problems.

Motor-operated Snap Switch.

A new motor-operated snap switch that can be used on either alternating or direct current, consumes little power, and is applicable wherever the automatic operation of electrical devices is desired, has recently been perfected by the Westinghouse Electric & Manufacturing Company. With mechanisms such as thermostats, pressure gauges, time clocks, and floats, the switch can be used to regulate electric heaters for heating water, oil or other liquids; to control the operation of domestic and commercial refrigerators; to regulate the temperature in electric ovens of all kinds; to control electric signs, street lamps and window lights; to

regulate the height of liquids in tanks and for many other purposes. In a factory this switch is especially useful when applied to electrical devices that should be started before the working day, such as forges and pre-heated furnaces, solder, die casting, glue and wax pots.

Change of Selling Arrangement.

J. F. Kinder, who has acted as western manager for the United Electric Co., of Canton, Ohio, has resigned and the company will hereafter dispose of its "Tuc" products, viz., the Ohio electric cleaner, the stationary electric cleaner and the swimming pool cleaner—direct through distributors.

Sale of Roller Bearing Plant.

The valuable plant of the Wright Roller Bearing Company will be sold at auction on the premises at Twentieth Street and Indiana Avenue, Philadelphia, Pa., at 10 o'clock A. M., on Thursday, November 9, according to a formal announcement elsewhere in this issue. Besides the real estate, which includes a two-story factory building, 61 by 270 feet and several other structures together with the ground on which they stand—there is a large amount of machinery, materials and equipment comprising automatic machines, engine and machine lathes, turret lathes, milling machines, shapers, tools and cutter grinders, power hack saws, arbor presses, drill presses, furnaces, compressors, electric motors, etc. Catalogs may be obtained from

the auctioneers, Samuel T. Freeman & Co., 1519-21 Chestnut Street, Philadelphia, Pa.

Moist Air Dry Kilns Installed.

Orders and installations of Moore moist air dry kilns by the Moore Dry Kiln Co., of Jacksonville, Fla., were recently made as follows: J. W. Rogers & Co., Lepanto, Ark., kiln for drying cypress lath; J. M. Griffin Lumber Co., Burnside, Miss., four kilns, to which two more will be added to dry entire cut; Elkin Veneer & Manufacturing Co., Elkin, N. C., a veneer kiln to be operated with exhaust steam, thus saving fuel; Fuel City Box Co., Clarksburg, W. Va., two hardwood flooring kilns; R. H. Benner & Co., Mobile, Ala., three veneer kilns for drying cigar box material; National Furniture Co., Mt. Airy, N. C., two hardwood kilns to use exhaust steam in the heating coils. These kilns are extensively used throughout the South.

Many Sales in the South.

Since its last report of September 14 the York Manufacturing Co., York, Pa., manufacturer of ice-making and refrigerating machinery, has made 134 sales and installations, including 36 at the following places in the South: San Antonio, Tex.; New Orleans, La.; St. Louis, Mo.; Port Arthur, Tex.; Mangum, Okla.; Houston, Tex.; Sapulpa, Okla.; Lumberport, W. Va.; Shelby, Miss.; Covington, Ky.; El Paso, Tex.; Morgantown, W. Va.; Mineral Wells, Tex.; Lexington, Ky.; Kansas City, Mo.; Chevy Chase, Md.; Petersburg, Va.; Baltimore, Md.; Dallas, Tex.; Nashville, Tenn.; Sweetwater, Tex.; Tampa, Fla.; Salisbury, N. C.; Lexington, Va.; Eastland, Tex.; Middlesboro, Ky.; Atlanta, Ga.; Wheeling, W. Va.; Suffolk, Va.; Stone Mountain, Ga.; Magnolia, Ark.; Rocky Mount, N. C.; McAlester, Okla.; Wilmington, N. C. At St. Louis and Houston, respectively, two installations were made.

A Tin Mine in Virginia.

By KIRBY THOMAS, New York.

Virginia boasts of having one of the few tin mines in the United States. It is located on Irish Creek in Rockbridge County. Tin ore was discovered in this region as early as 1840, but mining operations were not undertaken until 1850. A few years later a small mill was erected and tin ore concentrates were produced in small amount. Litigation over titles caused the work to be suspended and it was not again resumed until 1918, when as a war measure, the Virginia Courts permitted the contestants to prepare to operate the mine. However, the ending of the war and the general slump in the price of tin again caused the suspension of work.

It is reported that the ore in the veins which are about four feet wide will yield 3 per cent tin, a grade which is profitable to mine ordinarily. The tin ore is found in a bed of granite rocks about 4 miles long and 5 miles wide. It occurs in a coarse form of the granite called pegmatite and is probably one of the original minerals of the granite which itself is an eruptive formation which at some early period in the earth's history was forced from great depths to the surface.

The Virginia deposit is similar in nature and origin to those found in the Carolinas, but is apparently richer, for the tin bearing pegmatite of the Carolinas does not necessarily carry more than 1 per cent of tin.

Municipal Auditorium for Jackson, Miss.

Jackson, Miss., October 21—The Municipal Auditorium Committee has accepted plans submitted by N. W. Overstreet for the new structure to be erected at a cost of about \$125,000. The auditorium will have a seating capacity of 4500.

Breaking Down Oil Fuel Emulsions.

At the Bartlesville, Okla., experiment station, D. B. Dow, chemical engineer, of the Bureau of Mines, assisted by C. E. Reistle, junior chemist, is conducting an investigation to determine satisfactory methods for breaking down oil field emulsions. In several Mid-Continent fields, oil as it comes from the wells contains relatively high percentage of water emulsified with the oil (commonly known as B. S.) and in many cases this emulsion is run into sumps and burned. In some fields large quantities of B. S. are stored in tanks, because no economical method for treating them have been developed. In this investigation it is planned to study the methods that are now in use, such as steaming, chemical treatment, electrical process, and centrifugal separation, as a means of determining the method that is best suited for each particular type of emulsion.

A series of laboratory tests will be made in order to determine the effect of such factors as the viscosity of the oil, the relative percentages of oil and water, the effect of different salts dissolved in the water, and the presence of other emulsifying agents, such as finely divided silt. The effort will be made to develop a method of treating emulsion that will be economical for use on properties that produce only a few barrels of oil daily, where the installation of expensive equipment would not be justified.

Jewelry—Hand-Rolling Mills.

M. VALLINAYAGAM PILLAI, 42 Sea Street, Colombo, Ceylon.—Desires to receive from manufacturers of jewelry catalogs dealing with the making of jewelry and hand-rolling mills with prices and quotations for delivery at the Tuticorin port, of Colombo port. Also desires to know whether they can supply separate parts of the hand-rolling mills and the respective prices for them.

This Handy Investment Record

saves unnecessary trips to your safe deposit box and quickly furnishes complete information — amounts, interest dates, maturities, prices, taxable status, etc. — on your investment holdings.

It is made in loose-leaf form so that pages may be added as required — the pocket size is handy and compact.

Included is a bond interest table, also a chart of information on all issues of Liberty and Victory Bonds.

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A rich and stimulating volume it is, valuable to the investor, of daily use to the business man, and exceedingly helpful to student and educator. In thoughtfully compiled records like this is much of the meat of history; and truly may it be said of this one that it is a book, not only to be tasted, but to be "chewed, swallowed and digested."

—Atlanta Journal.

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8 1/2 x 11 — Full 20 lb. Weight

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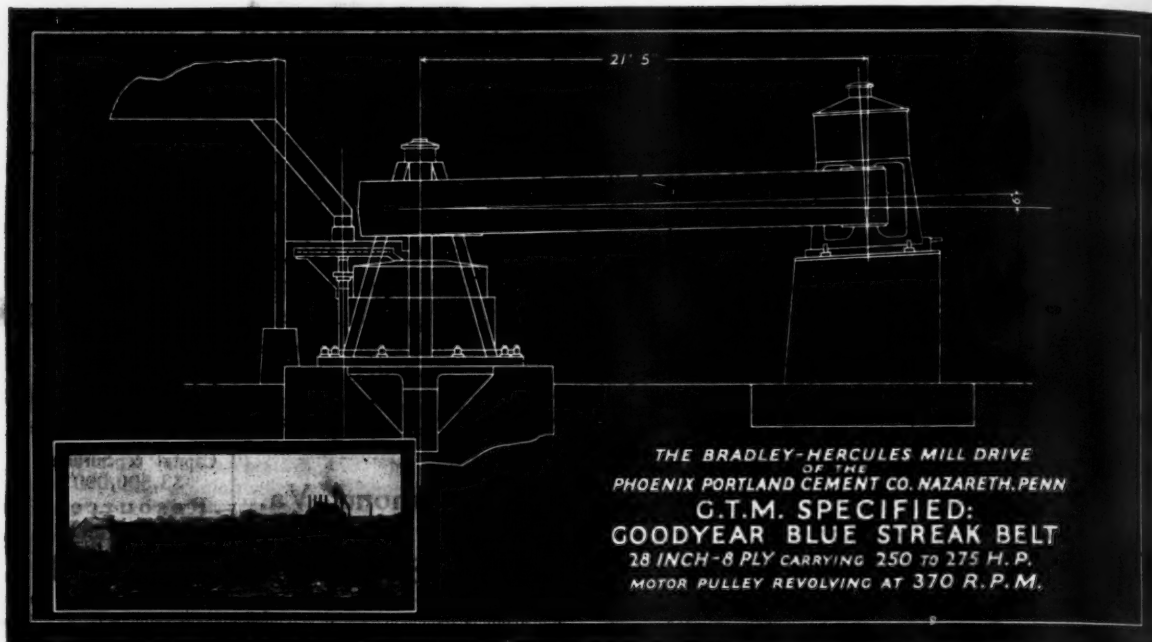
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Blueprint sketch of Goodyear-belted Bradley-Hercules Mill Drive of the Phoenix Portland Cement Company, Nazareth, Pennsylvania, and insert photograph of the plant

Copyright 1922, by The Goodyear Tire & Rubber Co., Inc.

THE BRADLEY-HERCULES MILL DRIVE
OF THE
PHOENIX PORTLAND CEMENT CO. NAZARETH, PENN.
G.T.M. SPECIFIED:
GOODYEAR BLUE STREAK BELT
28 INCH-8 PLY CARRYING 250 TO 275 H.P.
MOTOR PULLEY REVOLVING AT 370 R.P.M.

The Bradley-Hercules Drive—and the G.T.M.

It was the first plant analysis made by the G.T.M.—Goodyear Technical Man—that fully convinced Mr. E. P. Haubert, Secretary and Purchasing Agent of the Phoenix Portland Cement Company, of Nazareth, Pennsylvania, that the economical way to buy belting is to buy the particular belt for the particular drive.

"To be candid," he writes, "I was somewhat skeptical at the outset. However, we gave the G.T.M. full sway, co-operating with him by furnishing all data on operating problems peculiar to our plant, and the survey he made gave us exactly the records we wanted. We consider the Goodyear Company furnished us an extremely valuable service."

Carrying out the G.T.M.'s recommendation, the Company installed a 28-inch, 8-ply Goodyear Blue Streak Belt on a Bradley-Hercules Mill Drive, August 25, 1921. That is a vertical drive, transmitting power for crushing rock of size from $1\frac{1}{2}$ inches down into finer form for the pulverizing tube mill. It exerts a severe strain on any belt, for the belt must be kept under high tension, very tight, with the motor pulley revolving at 370 R. P. M.

"The best service we ever received on this particular drive from any belt whatsoever," is Mr. Haubert's summary of this Goodyear Blue Streak Belt's performance. "It stood by the

job for nine months, during which we put through 192,172 tons of raw material, enough to make 604,000 barrels of cement. The best previous belt record on that drive was 70,637 barrels less.

"The Goodyear Belt was by no means worn out when we took it off. We took it off only because we felt that it might possibly break at some time when the time lost by reason of changing belts would seriously affect our production. If we had had another Goodyear Belt as a spare, we would have left it on, and I feel sure would have got quite a bit of additional service from it.

"We have a number of Goodyear Belts, both conveyor and transmission, G.T.M.-specified, in addition to this Goodyear Blue Streak Belt, and they are giving correspondingly good service."

What the G.T.M. can do for one plant, in one industry, he may be able to do for your plant. He has an expert knowledge of Mechanical Rubber Goods. He has a practical knowledge of many industrial problems. You can rely on any Goodyear Mechanical Goods he recommends—belts, hose, valves and packing—to do their work more efficiently, more economically, over a longer time. For further information about Goodyear Mechanical Rubber Goods and the Goodyear Analysis Plan, write to Akron, Ohio, or Los Angeles, California.

GOODYEAR

Means Must Be Found to Enforce Respect for All Law

EARNEST O. GILLAM, Texas Cement Plaster Co., Dallas, Texas

No good business man can help but recognize the solemn warning issued by you on the cover of the MANUFACTURERS RECORD of August 24, under the caption "How Long Will This Country Be Content?", your reference being to strikes and bootleggers.

May I answer! Just as long as the business men see no direct injury to their business, this country "Will Be Content." I regret to say, yet it is an acknowledged fact, that business as a class is very timid in taking the lead in any moral or public question until positive as to how it will affect their trial balance. There are of course a great many individual exceptions to this rule, such as Henry Ford, R. A. Long, of Kansas City, and others, and without the business men any great reform is helpless, but once you reformers (and I consider the MANUFACTURERS RECORD the greatest reform publication printed in America, because of its sane appeal in a business manner to business men) get the business men thoroughly aroused to his danger and duty, action will be swift and complete.

I consider your outline of August 10, i. e.:—Keep all Un-naturalized Foreigners out of Labor Unions,—the best solution that has been presented to America for maintaining harmony between the unions and the employer, and will only add my endorsement to the idea by making one of the requirements to become an American citizen that the applicant be able to read and write the English language as well as to speak it.

I have a novel idea however, which I would like to suggest, which would make the bootleg business a very up-hill if not altogether an unprofitable business. I am again speaking from a business standpoint. The plan is as follows:—The passage of a bill by Congress placing an additional penalty to those already in effect, whereby every citizen of the United States who violates any of the Prohibition acts, or laws of the several states, (which of course includes the purchase of liquor)—for the first offense—disqualified from voting or holding any office of profit or trust for a period of five years. For the second offense, make the disqualification permanent. For all foreigners or un-naturalized Americans, the usual fines and imprisonments, and in addition, deport them.

You can readily see what would happen to the bootleg market with a law like this in the statutes. I know nothing for which any man would feel so keenly and permanently disgraced and injured as the application of the above as outlined. Also, the foreigners who know no disgrace do know that they want to stay here and we would have no trouble from that source, and I think I am safe in saying that high society, political, church and other organizations through

jealous, ambitious and righteous endeavors would enforce this sort of a statute with very little assistance from the authorities. Think it over.

It is time to wake up and enforce all laws and eliminate from suffrage those who do not believe in, understand, and respect our laws, or our Government will quickly sink into the ranks of the "nations of outlaws," in the eyes of the world and not only society but with it business will reap the whirlwind. The MANUFACTURERS RECORD is furnished to each of our several salesmen—it is so highly regarded by our management.

[This is a novel suggestion as to how to establish law and order in this country by the enforcement of the laws against criminality. Mr. Gillam calls upon the business men of the country to realize that the violation of law, the violence of strikes and the bootlegging and similar activities which have cursed this country, can only be rectified by the business men themselves. They must act, and vigorously. One interesting suggestion is that the violators of the Prohibition law shall, if American citizens, be disqualified from voting or holding any office of profit or trust for a period of five years, and for all foreigners and for all un-naturalized people living in this country who becomes violators the usual fines and imprisonment shall be applied and in addition—deportation. As drastic as this suggestion seems to be at first blush, it is not altogether improbable but that the time may come when the necessity for law enforcement may compel this nation to take steps fully as drastic as the proposition of Mr. Gillam.—Editor MANUFACTURERS RECORD.]

Two Steamers Building for Mississippi Service.

Memphis, Tenn., October 21—According to the local Chamber of Commerce two all-steel freight and passenger steamers for service on the Ohio and Mississippi rivers are being built for the Cincinnati Packet Co. at Midland, Pa. The boats, which are 285 feet long will have a capacity of about 1500 tons and accommodations for 250 people.

To Convert Hotel Into Office Building.

Washington, D. C.; October 21—The Investment Building Corporation which recently acquired the Bellevue Hotel here has announced plans for conversion of the building into a modern office structure. When completed there will be 108 offices, with space on the first floor for banking or brokerage purposes.

The city of Norfolk on October 1 took over the wharf, pier and warehouse property of the Old Dominion Steamship Co. on Water street. It will be leased to the Old Dominion Transportation Co., who will pay for the insurance and upkeep of the property during the period of its lease.

ROBERTS FILTERS FOR CLEAN WATER

Ideally adapted for installation in textile mills; raw water ice plants; laundries, and for all industrial or municipal requirements.

"Write for Descriptive Literature."

Roberts Filter Manufacturing Co.

DARBY (PHILA.) PENNA.

NEW YORK OFFICE—FLATIRON BUILDING.



Send for this Booklet on Boiler Scale

This booklet on boiler scale prevention is ready for you. It tells how 100% soft water absolutely prevents scale formation, how you can save fuel and labor, and how you can get an abundant supply of this money saving soft water at a negligible cost.

Your name on your letter head will bring this booklet to you.

Wayne Tank and Pump Co.
856 Canal Street, Fort Wayne, Ind.

Where would we be anyway if it weren't for advertising?

WHAT a lot of time advertising saves us! We need something. We see it advertised. And we go straight from where we are now to where the article is sold.

Have you ever gone around from place to place seeking for something which you knew existed but which nobody else seemed to know anything about, not even the store-keepers?

You have wasted an hour, maybe several hours, possibly half a day. You have worn out your patience, and before the end of the quest probably you began to figure that the thing, which you sought was not, after all, so good as you thought it was, otherwise other people besides yourself would know something about it.

The manufacturer who advertises, invests his money, therefore, not alone to tell of the

merits of his goods but to save you time. The manufacturer who is willing to pay for advertising space in newspapers or magazines in order to point out to you where his merchandise is sold, so that you may get there quicker and buy it easier, is not going to skimp or cheat in manufacturing it.

After going to all the trouble and expense of telling you just where you may find it, he is going to see to it that when you do buy it, it is good enough so that you will buy it again.

And in making up your mind about merchandise which is advertised, consider this last thought—the manufacturer can well afford to make it as good as it can be made because one sale means hundreds, even thousands of others following naturally and costing him nothing extra.

[Published by the MANUFACTURERS RECORD in co-operation with The American Association of Advertising Agencies]

PROPOSALS

BOND ISSUES BUILDINGS PAVING GOOD ROADS

Bids close November 10, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., October 20, 1922.—**SEALED PROPOSALS** will be opened in this office at 3 P. M., November 10, 1922, for furnishing and installing lighting fixtures in the U. S. Veterans Hospital, at Norfolk, Va., Tanners Creek Site, Main Hospital, East Wing, in accordance with the drawing and specifications, copies of which may be had at this office in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

Bids close November 24, 1922.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., October 23, 1922.—**SEALED PROPOSALS** will be opened in this office at 3 P. M., November 24, 1922, for construction of the United States Post Office at Chandler, Okla. Drawings and specifications may be obtained from the Custodian of the site at Chandler, Okla., or at this office, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

Bids close November 16, 1922.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., October 16, 1922.—**SEALED PROPOSALS** will be opened in this office at 3 p. m., November 16, 1922, for construction of the United States Post Office at Shawnee, Okla. Drawings and specifications may be obtained from the Custodian of the site at Shawnee, Okla., or at this office in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

RATE: 35 cents per line per insertion.

PUBLICATION DAY: Thursday.

FORMS CLOSE 4 P. M., Monday.

DAY LETTER: When too late to send copy by mail to reach us by 4 P. M.

Monday, forward by day letter.

THE DAILY BULLETIN OF THE MANUFACTURERS RECORD:

Published every business day; gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened, or when daily publications are necessary to meet legal requirements.

The same rate applies—35 cents per line per insertion.

Bids close November 17, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., October 20, 1922.—**SEALED PROPOSALS** will be opened in this office at 3 P. M., November 17, 1922, for the re-roofing of buildings and structures, as listed, for the United States Marine Hospital, (National Home for Lepers) at Carville, La. Specifications may be obtained at this office, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

Bids close December 1, 1922.

Proposal for Steel Barge—U. S. Engineer office, Montgomery, Ala. Sealed proposals will be received here until 11 A. M., December 1, 1922, and then opened, for one 80-ft.x26-ft.x5-ft. steel barge. Further information on application.

Bids close November 20, 1922.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., October 20, 1922.—Sealed proposals will be received here until 11 a. m. (Eastern time), November 20, 1922, and then opened, for furnishing and delivering horses and props for Ohio River Dam No. 32. Further information on application.

Bids close November 3, 1922.

\$100,000 5½% Road and Highway Bonds

POLK COUNTY, GEORGIA

Cedartown, Ga. Sealed bids will be received by T. W. Schliesstet, Clerk, Cedartown, Ga., until noon, Friday, November 3, 1922, for \$100,000 5½% coupon bonds dated January 1, 1923 maturing January 1, 1943, denomination \$1000; semi-annual interest payable January and July. Certified check for 2% must accompany each bid. County reserves right to take seven bonds to invest sinking fund. Principal and interest payable in gold at National Bank of Commerce, New York City. Legal opinion of Caldwell & Raymond, New York City, approving validity of issue will be furnished purchaser. For further information apply to **JOHN K. DAVIS, Chairman**, Cedartown, Ga.

FINANCIAL STATEMENT

Assessed valuation of taxable property, 1921 \$9,330,678
Total bonded indebtedness, exclusive of this issue 197,000
Population of County, 1920 census 20,357
Bonds will be delivered January 3, 1923, at Cedartown, Ga., or at National Bank of Commerce of New York, as preferred.

Bids close November 7, 1922.

\$1,500,000 5% Highway Bonds HILLSBOROUGH COUNTY, FLORIDA

Tampa, Fla.
Sealed bids will be received by the Board of County Commissioners, in care of the undersigned, in Tampa, Fla., until 10 o'clock A. M., November 7, 1922, for \$1,500,000 Highway Bonds maturing annually, July 1st, \$25,000 1924 to 1928, \$30,000 1929 and 1930, \$35,000 1931 and 1932, \$40,000 1933 to 1935, \$45,000 1936 and 1937, \$50,000 1938, \$55,000 1939 to 1941, \$60,000 1942 and 1943, \$65,000 1944 and 1945, \$70,000 1946, \$75,000 1947 and 1948, \$80,000 1949, \$85,000 1950, \$90,000 1951 and \$95,000 1952, all inclusive, without option of prior payment.

All bonds dated July 1st, 1922; denomination \$1000; principal and semi-annual interest (5% J. and J. 1), payable in New York City in gold; coupon bonds with privilege of registration as to principal only.

The bonds are to be prepared under the supervision of the United States Mortgage & Trust Company, New York City, which will certify as to the genuineness of the signatures of the County officials and the seal impressed thereon. Legality will be approved by Chester B. Masslich, Esq., New York City, whose approving opinion will be furnished to the purchaser without charge. The bonds are general obligations of the County, payable from an unlimited tax. Authorized by vote of electors.

Bids are required on blank forms, which will be furnished by the undersigned or said Trust Company, with additional information concerning the County, conditions of bidding and security required. Delivery at place of purchaser's choice about November 21st, 1922. The right to reject any or all bids is reserved. The bonds will not be sold at less than par.

W. R. WATKINS, Clerk of
Board of County Commissioners.

Bids close November 9, 1922.

Water Works and Electric Light Systems

Utica, Miss.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Utica, Miss., at their regular meeting place until 11 o'clock A. M., November 9, 1922, for the following:

One Oil Engine, directly connected to Alternator, one belted Alternator, Switchboard, Pumps, Pole line material, 12,000 Gallon Oil Storage Tank, Concrete Foundations, Repairs to building, etc.

Proposals must be marked, "Proposals for Light and Water Works Improvements." All bids must be upon blank forms provided in the specifications.

Each bid must be accompanied by a certified check (bidder's bond not acceptable) for five (5%) per cent of the amount bid, but not less than fifty (\$50.00) dollars, as evidences of good faith.

Plans and specifications will be on file at the office of the Town Clerk, Utica, Miss. and at the office of the Engineers in New Orleans, La., copies of the specifications, form of proposal, etc., may be obtained from the Engineers, Swanson-McGraw, Inc., New Orleans, La., by depositing five (\$5.00) dollars, which amount will be refunded to bona fide bidders, or if specifications are returned to the Engineers before the date of letting.

The right is reserved to reject any or all bids.

R. F. COOK, Mayor,
R. V. CURRIE, Clerk.
SWANSON-McGRAW, INC.,
Engineers,
705 United Fruit Building,
New Orleans, La.

Bids close November 2, 1922.

Sewer Tunnel

Tulsa, Okla.

Sealed proposals will be received by the Board of Commissioners of the City of Tulsa, Okla., until five o'clock P. M., November 2, 1922, for the construction of a Storm Sewer 5700 feet long, 5100 feet of which will be in tunnel cut. Approximate size 14 1/2 x 15 1/2 feet. Bond issue \$900,000.00. Estimates payable in cash. Certified bidding check five per cent.

Plans and profiles, etc., may be secured from City Engineer, upon deposit of \$25.00, which will be refunded to all parties submitting a bona fide bid.

CHARLES SCHULTZ,
City Engineer.
W. W. HORNER,
Consulting Engineer,
St. Louis, Mo.

Bids close October 30, 1922.

Bridge

South Hill, Va.

Sealed proposals will be received at the office of N. G. Smith, Supervisor, South Hill, Va., until 12 o'clock, noon, Monday, October 30, 1922.

1. The construction of a concrete and steel bridge across Meherrin River at Union Mills, Mecklenburg County, Virginia, approximately 161 feet in length.

2. Alternate: At same location, concrete abutments and piers with 1 beam girders and wood floor.

3. Bids will also be received on the reconstruction of the old bridge at same site, which involves the rebuilding of foundation pens and the construction of the superstructure of wood.

Approximate distance from South Hill, six miles. Width of roadway 12 feet. Character of superstructure, item 1, reinforced concrete slabs. Item 2, 1 beam girders and wood flooring. Character of substructure, concrete.

Number of working days to complete, sixty.

A certified check for \$200 payable to the Chairman of the Board of Supervisors of Mecklenburg County, Virginia, must accompany each proposal.

Plans and specifications are on file at the office of the State Highway Commission, Richmond, Va., and at the office of N. G. Smith, Supervisor, South Hill, Va.

Blueprints of plans can be secured from the State Highway Commission, Richmond, Va., at a cost of \$5.00 per set.

The right is reserved to reject any or all bids.

A. O. BRACEY, Supervisor,
N. G. SMITH, Supervisor,
South Hill, Va.

Bids close November 9, 1922.

Sand Clay Road

Tavares, Fla.

Sealed proposals will be received by the Board of County Commissioners, Lake County, Florida, at Tavares, in the County Court House up to 12 o'clock noon on the 9th day of November, 1922, and that time publicly opened, for the Grading, Drainage and Surfacing with Sand-Clay a section of road No. C-D, in East Lake County Special Road and Bridge District, of Lake County, Florida, between Eastliss and Tavares and Mount Dora, otherwise known as Lake Shore Drive, being approximately 10.3 miles in length, as shown on Plat No. 1 C-D.

Plans and specifications may be obtained on application to the County Engineer at Tavares, Fla., or at the office of the County Clerk, Tavares, Fla.

The right is reserved to reject any or all proposals.

T. C. SMYTH, County Clerk,
H. R. FERRAN, Chairman,
Board of County Commissioners.

GEO. E. HELLER,
County Engineer.

Bids close November 2, 1922.

Water Works Improvements

Laurens, S. C.

Sealed proposals will be received by the Commissioners of Public Works of the City of Laurens, S. C., until 12 o'clock noon on Thursday, the 2nd day of November, 1922, for Water Works Improvements.

The work will embrace a Mechanical Filtration Plant of reinforced concrete having a capacity of 1,000,000 gallons per day, together with the necessary piping, valves, etc.; Reinforced Clear Water Basin of 525 gallons capacity; Raw Water Station and Intake; furnishing and laying approximately one hundred tons of B. & S. Cast Iron Pipe; furnishing and installing two 250 gallon per minute motor driven Centrifugal Service Pumps, and two 750 gallon per minute Raw Water Pumps.

Plans and specifications are on file with the City Clerk at Laurens, S. C., and with the Engineer at Durham, N. C., and blank form of proposal, specifications, etc., may be obtained from the Engineer.

Those desiring a set of plans can obtain same upon payment of \$7.50, which will be returned to those making bona fide bids and returning the plans.

Certified check for five (5%) per cent of the amount bid for such items for which a proposal is made must accompany all proposals.

The right is reserved to reject any or all bids.

W. R. McCUEN, Chairman,
STANLEY W. CREWS, City Clerk,
WILLIAM M. PIATT,
Engineer,
Durham, N. C.

Bids close October 31, 1922.

State Highway Construction

STATE OF MARYLAND
STATE ROADS COMMISSION
Baltimore, Md.

SEALED PROPOSALS for building Eight sections of State Highway, as follows.

GARRETT COUNTY—Contract G-24—One section of state highway from Luke to Bloomington, a distance of 0.5 miles. (Penetration Macadam.)

ALLEGANY COUNTY—Contract A-22—One section of state highway along the Williams Road, for a distance of 1.6 miles. (Concrete.)

HOWARD COUNTY—Contract HO-26—One section of state highway along the Old Frederick Road from end of St. Johns Lane to the Woodstock Road, a distance of 2.56 miles. (Concrete.)

MONTGOMERY COUNTY—Contract M-39—One section of state highway through Laytonville, for a distance of 1.0 miles. (Concrete.)

MONTGOMERY COUNTY—Contract M-38—One section of state highway from Dawsonville toward Beallsville, for a distance of 1.0 miles. (Concrete.)

MONTGOMERY COUNTY—Contract M-37—One section of state highway from Dawsonville toward Seneca, for a distance of 1.0 miles. (Concrete.)

MONTGOMERY COUNTY—Contract M-40—One section of state highway from Seeks Corner to the Prince George's County Line, for a distance of 0.7 miles. (Concrete.)

ANNE ARUNDEL COUNTY—Contract AA-26—One section of state highway from Tracey's Corner toward Nutwell, a distance of 1.0 miles. (Gravel.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Md., until 12 M., on the 31st day of October, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 11th day of October, 1922.

L. H. STEUART, JOHN N. MACKALL,
Secretary. Chairman.

Bids close November 15, 1922.

Street Paving and Water Works

Galax, Va.

Sealed proposals will be received until 11 A. M. on the 15th day of November, 1922, at the office of the City Manager of Galax, Va., for the furnishing of materials and labor of constructing approximately 30,000 sq. yds. of a permanent type of street paving together with the necessary accessories and for the construction of a 250,000 gallon per day capacity water purification plant.

A certified check to the amount of 5% will accompany each bid and the right is reserved by the Town to reject any or all proposals.

Plans and specifications may be obtained from the Carolina Engineering Co., 412 Southern Building, Wilmington, N. C.

I. G. VASS, City Mgr.
THE CAROLINA ENGINEERING CO.,
Engineers.

Bids close November 2, 1922.

Water Supply System.

Front Royal, Va.

Sealed proposals for constructing two water lines for the Town of Front Royal, Va., will be received by the Mayor and Council of Front Royal, until 12 o'clock on November 2, 1922.

Proposals must be accompanied by a certified check for \$700.00, made payable to the Mayor and Council of Front Royal, Va., and must be addressed to E. S. West, Recorder.

Plans and specifications may be obtained from the Mayor and Council, Front Royal, Va., or from F. M. Richey, City Engineer, Front Royal, Va., by depositing check for \$10.00, which will be returned when the plans are returned.

The Mayor and Council reserve the right to reject any or all bids.

MAYOR AND COUNCIL,
Front Royal, Va.

Water Works

Elkton, Va.

Elkton, Va. is contemplating installing water system to cost \$75,000; will be glad to hear from any one interested.
C. W. McGuire, Pres.

Bids close November 7, 1922.

Sewage Disposal

Miami, Fla.

Sealed proposals will be received by the Commission of the City of Miami, Fla., at their regular meeting, November the 7th, 1922, until 9 a. m., for furnishing:

- 1—Motor driven sewage screen, including motors and necessary equipment; capacity 2100 gallons per minute.
- 2—Motor driven centrifugal pumps, including motors and necessary equipment; capacity 2100 gallons per minute, against total head of 30 feet.
- 2400 feet 16-inch, Class B Cast Iron Pipe.

Each proposal must be accompanied by a certified check for 2½ per cent of the amount of the bid, or by bidder's bond, to insure the execution of the contract as provided by Section 56 of the City Charter.

The Commission of the City of Miami reserves the right to reject any or all bids. Detailed specifications and bidders' blank form can be obtained from Chas. W. Murray, Director of Public Service, upon deposit of \$10.00, this deposit to be returned to those submitting a bona fide bid.

F. H. WHARTON, City Manager.

Bids close October 23, 1922.

Bids close November 10, 1922.

Notice to General and Mechanical Contractors

Atlanta, Ga.

Bids will be received for general contract work and mechanical work on the Colored Junior and Senior High School, on or before 3 P. M., Friday, November 10, 1922, by the Board of Education, City of Atlanta.

Character of contract and sub-division of estimates to be as called for on the bid blank.

Bids to be addressed to Board of Education, care of Mr. J. N. Landers, "City Purchasing Agent" and endorsed on cover for character of work. Bids for school building (insert name of school and trade bid on as listed above.)

Each bid must be accompanied by a certified check in the sum of 2% of the base bid of trade or trades, bid on, under the conditions of specifications.

The Board reserves the right to reject any or all bids and waive technicalities.

Plans and specifications (made by E. C. Wachendorf) and bid blank may be procured at the office of the Supervising Architect, A. Ten Eyck Brown, 717-20 Forsyth Building, at his discretion.

(Signed) J. N. LANDERS,
City Purchasing Agent.

Bids close November 8, 1922.

Drainage Improvements

Statesville, N. C.

October 21, 1922.

Sealed proposals for the construction of drainage improvements in Iredell County,

Upper Third Creek Drainage District No. 1, will be received by the Board of Commissioners up to 12 o'clock, the 8th day of November, 1922, at the Court House, Statesville, N. C. The work to be done consists of about 8 miles of ditch containing approximately 137,314.8 cubic yards of dirt, and approximately 1000 cubic yards of rock. The work is to be completed by the first of January, 1923, if possible. A certified check in the sum of \$500.00, payable to the Board of Commissioners must accompany each bid. The Board reserves the right to reject any and all bids. Plans and specifications may be seen at the office of the Board in Statesville, N. C., or at the office of W. D. Alexander, Engineer, Charlotte, N. C.

J. H. HARRIS, Chairman
L. F. ERVIN, Secretary.

Bids close December 4, 1922.

Notice to Architects and Engineers

Vicksburg, Miss.

Sealed proposals will be received at a meeting of the Mayor and Aldermen of the City of Vicksburg, Miss., to be held at the City Hall in said City, at 4 o'clock P. M. on Monday, December 4, 1922, for plans and specifications for the erection of two public school buildings.

All information and details of the proposed buildings and the number of pupils to be accommodated may be had upon application to S. S. Patterson, City Clerk of said City.

The City reserves the right to reject any and all bids that may be submitted.
J. J. Hayes, Mayor.



CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS WATER POWERS, MISCELLANEOUS PROPERTIES

Wealth in virgin coal fields in Northern Alabama, near Tennessee River. Ready to mine with electric equipment; entries driven. Superior domestic, steam and gas coal; unsurpassed in the South as an export coal. Iron ore, fire-clay, cement rock and limestone in vast quantities. Five million feet of Poplar, Oak and Hickory timber on property. Industrial railroad connecting with Southern Ry. system. Soil overlying 16,000 acres, ideal for cattle, sheep and Angora goats and for fruit raising. For full particulars, price and terms, write F. D. Pierce, 1505 E. Genesee St., Syracuse, N. Y.

FOR SALE—84 acres, 50 acres nice timber; good hunting and fishing. Large stone bluff on C. & O. R. and State Highway. Analysis and sample of stone furnished. Postmaster, Irwin, Va.

RICH LIGNITE MINE: \$45,000 CASH. TEXAS—Newly opened. Producing Good Market. Rich by-products shown by Texas University analysis. On R. R. main line. Buyer to pay 5% commission. **FRANK H. KELLEY COMPANY**, Rockdale, Tex.

ASBESTOS MINE

GEORGIA—Asbestos mine, 145 acres, sell or lease on royalty. Unlimited short fibre asbestos. Complete data available. A. W. Johnson, 212 Mass. Bldg., Kansas City, Mo.

COAL LANDS AND MINES LEASE OR SALE

600 acres of coal land in the heart of the Wise County Coal Field, near Glamorgan, Va. Would consider sale or lease, lease preferred, carries all the seams in the field, near Interstate Railroad. Price and description on request. **W. H. Roberts**, Wise, Va.

FOR SALE—Going coal mines—coal, oil and gas lands—timber tracts. Reports made on same anywhere. **E. H. Morris**, Box 518, Charleston, W. Va.

MANGANESE PROPERTY MANGANESE PROPERTY

If interested in developing or purchasing such property, address **J. E. Hill**, 1212 12th Court North, Birmingham, Ala.

RATES AND CONDITIONS

Rate 30 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 25c. per line; 500 lines, 26c. per line; 500 lines or more, 25c. per line.

TIMBER

FOR SALE—TIMBER ON 4000 ACRES of land on railroad, 20 miles north of Vicksburg, Miss., consisting of about two-thirds White and Red Oak. Balance Gum, Cypress, Pecan, Ash, etc. Will cruise about 5000 feet to the acre. Address **Harry Marshall**, South Brownsville, Pa.

Hardwood timber on 17,000 acres of land from which larger mill logs are being removed. A good proposition for handle or slack barrel factory. Reasonable arrangements may be made by responsible purchasers. Write care P. O. Box 609, Opelousas, La.

YELLOW FIR TIMBER—FOR SALE 300,000,000 feet yellow fir, key to a very much larger tract. The timber is as fine as there is on the coast and in a solid body, standing on 4000 acres. No deep canyons—long, gradual slopes. Location: Lane County, Oregon. \$1.50 per M. Address **G. THEDEN**, 1034 Security Bldg., Minneapolis, Minnesota.

TIMBER OPERATIONS

"Hardwood Saw Mill and Timber"—One seven-foot Clark band mill, two engines, three boilers, locomotives, log loader, log cars, rail, tools, electric light plant, etc. Store house, 21 dwellings. Complete equipment all new in 1920; 6925 acres hardwood. Write for full details to **R. P. Johnson**, Wytheville, Va.

TIMBER LAND

3000 acres of virgin hardwood timber, containing 12,000,000 feet, located in Sevier County, Tennessee; easy logging, \$18 per acre; a rare opportunity that will bear the closest inspection. **Moore Land Company**, Knoxville, Tenn.

FARM, FRUIT, AND TRUCK LANDS**FLORIDA**

FOR SALE—Comfortable winter home with ocean and river frontage, in Palm Beach County, Florida. For particulars write **P. O. Box 1132, Ft. Lauderdale, Fla.**

FLORIDA—Strawberry land; orange land; all kinds truck land. Improved and unimproved land; timber land. Prices and terms. Write **WOODRUFF REALTY COMPANY, ORLANDO, FLA.**

FLORIDA—Come to Florida, "where its summertime in the wintertime, and pleasant all the year round;" no coal bills; no wintry ice or snow—just sunshine, and health and opportunity. Send for booklet, "Largest Orange Tree in the World," and list of homes, groves and farms. Tampa West Coast Realty Co., (Inc.) opposite Post Office Since before the War." Tampa, Fla.

Rich, deep muck Everglade land, 10 acres to 25,000 acres, near Pennsylvania Sugar Company's \$1,250,000 sugar mill, north and west of Miami, Fla.—Price \$15.00 per acre up. Stewart, Hollister & McCune, Realtors, 136 N. E. 1st St., Miami, Fla.

SOUTH CAROLINA

Truck farms that pay dividends annually can be bought at reasonable prices here. Vegetables are shipped eight months in the year. Three and four crops are grown on the same land annually. Excellent climate and health. Plenty of labor; strikes unknown. Well organized association that sells all farm products. For particulars write **Lake Realty Company, Beaufort, S. C.**

TEXAS

4200 acres heavy black land almost adjoining Corpus Christi, fronts three miles on road which will be hard surfaced, finest sub-division property in Texas, will sell as a whole for \$65 per acre or sub-divide in small tracts. For full particulars write **Grubbs Realty Co., Corpus Christi, Tex.**

TEXAS

20,000 acres level black land, all tillable, three miles from station on railroad, adjoining land nearly all in cultivation, abundant artesian water 600 to 800 feet, worth \$40 per acre in 40-acre tracts, form a company and re-sell, our price \$15 per acre net. RANCHES: 9600 acres, improved Duval Co., \$9.00 per acre. 10,200 acres Live Oak Co., three houses and barns, \$12.00 41,000 acres on Brooks and Hadalo line, near King of Trails Highway, \$7.00 per acre. 100,000 acres Terrell Co., lots of water, several houses, \$6.65 per acre, will divide. Write for full description. GRUBBS REALTY CO., CORPUS CHRISTI, TEX.

BUSINESS OPPORTUNITIES

If interested in the
BEST SECTION OF THE SOUTH
If you want a Cotton Mill,
or Southern Mill Stocks
or Investment in Central Real Estate
or Large Suburban Development property
or a Manufacturing Site
Address
F. C. ABBOTT & COMPANY
Trust Building, Charlotte, N. C.

WANTED—Party with ten thousand (\$10,000) dollars or more, manufacturing proposition. An Anti-Texedo Wood Preservation. P. O. Box 624, Jacksonville, Fla.

COME SOUTH—Buy land. Build home. Go into business. Make money. Learn about the "Garden Spot of Dixie." Send for "THE LENORIAN," LaGrange, N. C.

RICHMOND, VA.—GATEWAY TO SOUTH
For Rent—For Sale—For Rent—For Sale
From 10,000 to 200,000 sq. ft.; for factory, distribution and warehouse businesses. Gordon E. Strauss Co., 918½ E. Main St., Richmond, Va.

I SPECIALIZE in industrial, warehouse and business sites at and adjacent to Washington, D. C.

M. B. HARLOW.
Harlow Building, Colorado Building,
Alexandria, Va. Washington, D. C.

Interest open in Marine Transportation and Commission Company. Business enough from South to earn \$300,000 Net Annually. 25% on capital invested. Alfred S. Perry, Perry Building, Fairfield, Conn.

Wanted a REAL MANUFACTURER—to co-operate with me in building and marketing the best design of TRACTOR ever offered the Southern farmer. Territory unlimited. Address No. 6084 care Manufacturers Record, Baltimore, Md.

Very rich deposit of platinum and iridium. Capital needed to recover values. Address H. J. Barton, President Siskiyou Mines Association, Yreka, Calif.

MIAMI, FLORIDA

The fastest growing city in the U. S. A. Four million acres richest land. Building million dollar sugar refinery. Excellent investment opportunities, big profits and safety here.

Ask for information and literature.
DAVENPORT & RICH REALTORS
MIAMI, FLORIDA.

FINANCIAL

Prosperity of banking corporations built upon the ruin of the people. Read "The Betrayal of the People" by Congress in passing the fraudulent gold basis Federal Reserve Act, and defeat any Representative who now tries to defend this financial scheme to rob the people. Popular edition. 25 cents. The Monetary Educational Bureau
1416 F St., Washington, D. C.

OPPORTUNITY FOR CONTRACTORS' INVESTMENT

A Texas contractor, widely known for large contracts, has one approximating ten million dollars on water power plants where three millions have been expended. Wants \$30,000 for preliminary expense. Will give absolute security and large profit. Write for particulars. P. O. Box 837, San Antonio, Tex.

BONDS—Have buyers for manufacturing, mercantile, industrial, mining; entire issues. A. W. Johnson, 212 Mass Bldg., Kansas City, Mo.

INDUSTRIES WANTED

INDUSTRIES WANTED—To locate at Oldsmar on Seaboard Railroad, 15 miles west of Tampa, Fla. Buildings and acreage for rent or for sale, easy terms. Reolds Farms Co., Oldsmar, Fla.

BUSINESS OPPORTUNITY

Elkton, Va., a beautiful town of 1200 to 1500 people. Located on state highway and Lee highway to come into the town, makes it an ideal place for creamery, silk mill or any other manufacturing plant desiring good location. Any one interested call on or write
C. W. McGUIRE, Prest.

FACTORY SITES

FREE FACTORY SITES.
FINANCIAL ASSISTANCE
AND OTHER ATTRACTIVE INDUCEMENTS

J. D. Stone & Company, Inc.
No. 4 Arcade Building,
Norfolk, Va.

BALTIMORE

FACTORY

SITES

William Martien & Company.

1413 Lexington Bldg.

Baltimore, Md.

NEW ORLEANS.

Commercial and Factory Sites and Buildings
Gurley & Parkinson,
338 Carondelet St.

INDUSTRIAL PLANTS

FOR SALE OR LEASE—Manufacturing site: 25 acres, Elkridge, Md.; on Patapsco River; about 180 H. P. developed; good buildings; partly equipped; main line B. & O. Address R. W. Kime, Salem, Va.

FOR RENT OR FOR SALE

Machine shop 60x200, with machinery; assembling shop 45x105; loading platform 20x120; office building 24x45, blacksmith shop. Easy terms. On Seaboard Railroad at Oldsmar, 15 miles west of Tampa. Reolds Farms Co., Oldsmar, Fla.

HOSIERY MILL FOR SALE

Small, old established mill making men's half hose and children's ribbed hose, now running and showing profits, good reason for selling; located in North Carolina. Address No. 6080 care Manufacturers Record, Baltimore, Md.

TENNESSEE—2-story, brick Woolen Mill in operation. Receiving orders daily, enough on file to keep mill running several months. Water power, completely equipped, 40 looms, 100 acres land, 4 residences, 11 tenant houses. 2-story, brick commissary. Price \$50,000. Complete data available. A. W. Johnson, 212 Mass. Bldg., Kansas City, Mo.

PATENT ATTORNEYS

INVENTORS—Send sketch or model of your invention, for opinion concerning patentable nature, and exact cost of applying for patent. Book, "How to Obtain a Patent" sent free. Gives information on patent procedure and tells what every inventor should know. Established 25 years. Chandler & Chandler, 412 7th St. N.W., Washington, D. C.

PATENTS—Booklet free. Highest references. Best results. Promptness assured. Watson E. Coleman, Patent Lawyer, 624 F St., Washington, D. C.

PATENT-SENSE.
"The Book for Inventors
and Manufacturers."

FREE. WRITE
LACEY & LACEY,
Dept. 15. Washington, D. C. Est. 1869.

PATENT ATTORNEYS

PATENTS, TRADE-MARKS AND COPYRIGHTS—Write for our Free Illustrated Guide Book and EVIDENCE OF CONCEPTION BLANK. Send model or sketch and description of your invention for our opinion of its patentable nature free. Highest references. Prompt service. Reasonable terms. Victor J. Evans & Co., 712 9th St., Washington, D. C.

AGENCIES WANTED

Sales Agency—Solicits correspondence with manufacturers for the sale of their products in Joplin territory. Robt. A. Wilson, 202 Ind. Bldg., Joplin, Mo.

SITUATIONS WANTED

SUCCESSFUL SECRETARY WANTS POSITION

Position as Commercial Secretary wanted in town of from 20,000 to 50,000 population in North Atlantic or middle states. I have made a success in this line and now hold good position, but for certain reasons apart from the job, desire new location. Have had wide business experience, am trained publicity man, and familiar with freight matters. First-class references furnished. No. 6081 care Manufacturers Record.

Traffic Manager—Industrial—open for position. Especially versed in lumber traffic—thoroughly familiar in other commodities. References. Address No. 6086 care Manufacturers Record, Baltimore, Md.

MEN WANTED

SUPERINTENDANT, experienced in shop practices and management by a manufacturer of farm implements. Applicants give age, experience, references and salary expected. Opening is for a man in position to invest \$10,000 in preferred stock of the company. Address No. 6083 care Manufacturers Record, Baltimore, Md.

WANTED—By a sash and door jobbing house with manufacturing connection, a high-grade salesman for North Carolina and Virginia. Communicate with—Address 6085 care Manufacturers Record, Balto., Md.

Energetic salesman with engineering knowledge to represent high-class tank manufacturer in southern territory. Address reply, stating experience, age, salary expected and reference, to No. 6077, care Manufacturers Record, Baltimore, Md.

A LEADING ORGANIZATION desiring to fill an important position, for obvious ethical and other reasons, cannot invite directly the candidacy of any particular man. Similarly, no well-connected man will exploit personally his own qualifications, no matter how receptive he may be to overtures. The undersigned has been retained by a national clientele for many years, as a medium for negotiating preliminaries in such cases. Your permission to send booklet discussing this problem and describing the service, will in no degree obligate or compromise you. Strictly confidential. R. W. Bligh, Inc., 303 Lockwood Bldg. Buffalo, N. Y.

Wanted Salesmen—Refrigerating salesmen to work in exclusive territory on percentage basis. Must be able to furnish good reference, and would prefer financing own expense account. De Loach Quick Ice Machine Co., Columbia, S. C.

MACHINERY AND SUPPLIES

We have a limited number of 15 and 20 H. P. New Cushman two-cylinder oil burning engines to offer at bargain prices. For prices, etc., write Cole Bros., Chilhowie, Va.

Valves, pipe fittings, all kinds and sizes; new stock. Can positively save you money on quantity purchases. What are your requirements? Pratt Thompson, 220 E. Lexington St., Baltimore, Md.

FOR SALE—Two 60 H. P. return tubular Boilers. One 85 H. P. Skinner, automatic high speed Engine. One 50 K. W. Generator. Ideal equipment for small Municipal Light Plant, Saw Mill or Industrial Plant. All in fine condition. Address Box 537, Montgomery, Ala.

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Name, Contracts and Equipment For Sale of Corporation doing Bridge Work

Have \$200,000.00 worth of contracts on hands, well equipped and in good location, would like to sell name, contracts and equipment.

Correspondence solicited from parties who have the money and are interested in this line of work.

Address A272, care Manufacturers Record
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I will furnish two-story Building 30x60, Railroad Siding and Electric Current alongside, for an interest in a reliable manufacturing proposition. Location near Trenton, N. J.
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A SPLENDIDLY MILL CONSTRUCTED BRICK BUILDING
three stories high, 280 ft. long x 65 ft. wide. Situated in a live Southern Virginia town of 6,000 population and located on two railroads; Southern and Norfolk & Western. Sidings run parallel, building full length on both sides. Will sell at a great bargain. Terms, liberal.

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Hydro-Electric Plant—Bargain

Located in Georgia on two Trunk line Railroads, Developing 300 H.P. complete with generators transmission lines, etc. Present income from sale of power about \$6000.00. By raising Dam 12 feet can be made to realize \$15,000.00 per year. Offered for quick sale at \$35,000.00 half cash balance in one to three years. Excellent location for cotton mill.

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Being a mining center, coal for fuel is abundant, cheap and always obtainable. Electric power at reasonable rates. Abundant water and low taxes.

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Detailed information on request. All inquiries held confidential.

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INCORPORATED
"Refunds Your Fare From Anywhere"
ROBERT N. KERR & SONS

THE BROWN HOTEL

will be a 15 story structure fronting 130 feet on Broadway and 101 feet on Fourth Ave. A feature of the construction will be that each of the 600 rooms will be an outside room and be provided with a bath. The estimated cost is \$1,500,000.00, bringing Louisville's building program for the current year to a total of \$18,900,000.00.



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Material and Equipment—About 350 tons chrome nickel bar steel; 2 National platform counting scales; International Time Recorder; large quantity of finished and unfinished parts of Wright Roller bearings; emory wheels, small tools, chucks, collets, taps, gauges, and a large supply of finished bearings.

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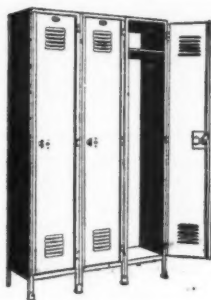
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Plain Slide Engine
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OIL ENGINE 60 H. P.
 With 2 air tanks, storage tank, air compressor, magneto, clutch pulley, drive pulley, counter-shaft. A 1 order\$600.
OTIS PASS. ELEVATOR
 Direct to A.C. Motor, controller, fine Cab 6' 9"x7' 6", all Shoes, Cables, Weights, Brand New..\$1350.
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Sizes
 12 x 12 x 60 inches
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Better send in your inquiry now—and get the low price on these handsome steel lockers.

Advise quantity, sections and size desired. Lockers crated; knocked-down in sections; two keys with each locker; master key with each set.

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New Type E Westinghouse, 2 or 3 Phase no voltage release Starters, from 5 to 100 H.P. Volts 220-440-550.
At Attractive Prices.

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500 tons 6" 12½ lb. I-Beams 15' 0" long
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Exceptionally low price before removal.
 Located New Cumberland, Pa.

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IMMEDIATE SHIPMENT

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40 New Scranton Size 6 x 5¼ x 6

Price \$150 Each

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10—19 x 8 Le Blond double back geared, quick change, belt driven

Price \$500 Each

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2500 H.P. 3600 RPM
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5/8 Yard No. 2 Ransom, driven by 7"x7" Vertical Steam Engine. A portable Rig on wheels in excellent condition.

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Established 1900

**250 to 1000 H. P.
WATER TUBE BOILERS****Immediate Delivery!**

New, high-grade water tube boilers, 250 to 1000 H. P. ready for immediate delivery from points in the East, North and Central West.

Steel encased or for brick setting. Immediate delivery can be made from Chicago or our Eastern Headquarters in New Jersey, opposite New York City or Slidell, Louisiana in New Orleans.

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27"x10' Greaves Klusman Heavy Duty D.B.G. Quick Change.

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GENERATOR BARGAINS.

1—200 KW, 720 RPM, 2300 V, 60 Cy, 3 Phase.
1—100 KW, 900 RPM, 2300 V, 60 Cy, 3 Phase.
1—30 KW, 110 V, D.C., Western Electric direct connected to 60 HP vertical steam engine.
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1—20 KW, 1150 RPM, 125 V, D.C., F.M. Belted.
1—6 KW, 35 or 125 V, D.C., G.E. Oil Eng. Set.
Large Stock, 3 Phase, 60 Cycle Motors At Low Prices.

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AIR DRILLS, HAMMERS, ETC.

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The above are all used tools.
175—Tons New rivets.

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1—100' Dry Kiln with 13,000 ft. 1" pipe, track, headers, girders and braces.
1—Soule Flat Stack.
1—Mogul type Locomotive.
1—22x30 H S & G side crank engine, with 12"x34" wheel.
2—60x16 Boilers.
1—60x18 Boiler.
1—50x14 Boiler.
1—No. 3 Wicke's Gang, with 50 37x3/4 saws.
1—Filler & Stowell 10x12 twin engine, with spool and sheaves.
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1—40' four block Prescott carriage hand set works and track.
1—No. 94 Berlin 6x9 Matcher.
1—Hall & Brown 4x9 "Mississippi" Matcher.
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Also about 40 thousand acres cut-over land, good farming land; well water and healthy. Location ideal for colonization.

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Blowers and Exhausters

12—18" Electric Disc Exhaust Fans.
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2—No. 6 Buffalo B Volume Blowers.
1—No. 7 Buffalo B Volume Blower.
2—No. 8 Buffalo B Volume Blowers.
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5—No. 4 1/2 Buffalo Niagara Conoidal Fans.
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24—No. 6 Buffalo Niagara Conoidal Fans.
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1—30" Buffalo Standard Reversible Mill Exhauster.
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2—120" Induced Draft Fans.
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Write for descriptions and prices

NASHVILLE INDUSTRIAL CORPORATION
JACKSONVILLE - TENNESSEE

20 K. W.

125 v. Crocker-Wheeler Generator, direct connected to 8 x 9 Fleming Harrisburg, horizontal, side crank, automatic engine, complete with rheostat for back of board. Operated 6 months. Price \$650 cars Phila.

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220 volt D.C. MOTORS LIKE NEW at sacrifice prices.—We are overstocked and closing these out—Low PRICES for immediate sale.—

GREGORY ELECTRIC CO.
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Send For Monthly Bargain Sheet

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**IN TROUBLE
MOTORS RENTED**

Any Size or Kind

Largest stock of its kind in America.

NATHAN KLEIN & CO.
208 Centre St., N. Y.

**NEW AND SECOND HAND
MACHINERY FOR SALE**

2—250 H.P. Heine Safety Boilers with fixtures.
1—125 H.P. High Pressure Locomotive type Boiler, 66 inch dia. 18 feet long over all, 199—2 inch flues 10 feet long. Fire box 1 ft. 10 in. wide by 5 ft. 9 in. long by 4 ft. 6 in. deep. 43 feet of 30 inch stack, all regular Catalogue Fittings. Good for 150 lb. pressure.
The above have been used but are in A No. 1 condition.
1—80 H.P. Locomotive type Boiler, 50 inch dia., 21 feet long over all, 63—3 1/2 inch flues 14 feet long. Fire box 3 1/2 feet long by 4 feet deep by 4 feet wide. A1 Catalogue fittings including Stack, 125 lb. pressure. This is a New Boiler.
1—8 inch Centrifugal Dredge Pump with 200 feet of 8 inch spiral riveted galvanized pipe with elbows, rubber sleeve connections, suction hose, pulley shafting, clutches, winch heads, etc. This is a complete dredging outfit. New—Never been set up.
1—Hill Curtis Steam Drag Saw. Cylinder 8 inches 4 feet. Saw 10 inches by 8 feet. New.
1—6 H.P. Fairbanks-Morse Single Drum Hoisting outfit. Gasoline Engine, magnet equipped. Good condition.
4000 feet of 1 inch 6x9 Monitor Logging Rope.
8000 feet of 3/4 inch Crucible cast steel Hoisting Rope. This is American Steel & Wire Co.'s Rope New.
1—32 inch by 6 inch Power Grind Stone with 24 inch by 6 inch pulley (mounted).
900,000 lbs. of 25, 30, 35, and 40 lb. Relay Rail, straightened, trimmed and drilled.
McGOWIN-LYONS HDWE. & SUPPLY CO
MOBILE, ALA.

THE RANDLE MACHINERY COMPANY

1734 POWERS STREET
Established 36 years
CINCINNATI, OHIO

A. C. GENERATORS.

Belted and Direct Connected.

- 1-5000 kw. General Electric Vertical, 3 phase, 60 cycle, 4500 volts. Turbo Generator Set, with Condenser and accessories.
- 1-1200 K.W. General Electric, 3 phase, 60 cycle, 250 volt Generator, direct connected to Filer & Stowell, cross compound, Corliss Engine.
- 1-600 K.W. General Electric, 3 phase, 60 cycle, 250 volt Generator, direct connected to an 18 x 42 x 30 Filer & Stowell Corliss Engine.
- 1-500 K.W. Westinghouse, 3 phase, 60 cycle, 2300 volt Generator, direct connected to a 26x42 Hamilton Corliss Engine.
- 1-350 K.W. Westinghouse, 3 phase, 60 cycle, 220 volt Generator, direct connected to a 26 x 42 Murray Corliss Engine.
- 1-300 kw. General Electric, 3 phase, 60 cycle, 2300 volt Turbo Generator Set, Condensing.
- 1-250 K.W. Westinghouse, 3-phase, 60-cycle, 220-volt alternator, direct connected to a 22 x 42 Murray heavy duty Corliss engine.
- 1-250 K.V.A. Allis-Chalmers, 3 phase, 60 cycle, 2300 volts, 600 R.P.M. belted type Alternator.
- 2-200 K.W. each, DeLaval-Bullock, 3 phase, 60 cycle, 220-440 volts Turbo Generator Sets, with condensers and accessories.
- 1-125 K.V.A. Ft. Wayne, 3 phase, 60 cycle, 1150-2300 volts Generator, direct connected to a 15 x 16 Erie-Ball Automatic Engine, with accessories.
- 1-100 kw. General Electric, 3 phase, 60 cycle, 220 volt, 3000 R.P.M. Turbo Generator Set with Condenser and accessories.
- 1-62½ K.W. Lincoln, 3 phase, 60 cycle, 480 volt Generator, direct connected to an 11 x 12 Chandler & Taylor Automatic Engine.

D. C. GENERATORS.

Belted and Direct Connected.

- 1-510-K.W. Crocker-Wheeler, 300 volt, compound wound, Generator, direct connected to a 19 x 40 x 30 McIntosh & Seymour Engine.
- 1-300-K.W. Triumph, 250-volts, compound wound generator, direct connected to a 15 x 28 x 30 Hamilton cross compound Corliss engine.
- 1-250 K.W. Triumph, 125 volts, generator, direct connected to a 22 x 20 Skinner Automatic Engine. (Can be rewound for 250 volts.)
- 1-150 K.W. Westinghouse, 275 volts, 200 R.P.M. Generators, each direct connected to an 18 x 19 Fleming-Harrisburg Automatic Engine.
- 1-125-K.W. Fort Wayne, 230-volts, compound wound generator, direct connected to a 17 x 16 Skinner automatic engine.

- 1-100 K.W. Triumph, 125 volt, 675 R.P.M., compound wound, belted type Generator.
- 1-75 K.W. Ft. Wayne, 250 volts, compound wound, Generator, direct connected to a Skinner Automatic Engine.
- 1-38½ K.W. Western Electric, 250-volts compound wound generator, direct connected to a 9 x 12 Skinner engine.
- 1-85 K.W. Triumph, 125 volt, compound wound, Generator, direct connected to a 2x12 Skinner Automatic Engine.
- 1-22½ K.W. Allis-Chalmers, 120 volt, 187.5 amp, 925 P.M., compound wound, belted type Generator.
- 1-20 K.W. Western Electric, 1250 R.P.M. 120 volt, compound wound, belted type Generator.
- 1-17½ K.W. Triumph, 125 volt, 140 amperes, 250 R.P.M., compound wound, belted type Generator.

BOILERS

- 1-1040 H.P. Edgemore, ASME Code, 200 lb. pressure
- 8-520 H.P. Stirling, 175 lb. pressure.
- 3-250 H.P. Franklin Heine type, 150-lb. pressure.
- 3-207 H.P. Geary, Heine type, 175 lb. pressure.
- 2-175 H.P. Atlas, 150-lb. pressure.
- 1-175 H.P. 78x18, high pressure, H. R. T.
- 4-150 H.P. 72x18 high pressure H. R. T.
- 5-125 H.P. 72x18 high pressure H. R. T.
- 2-100 H.P. 68x16 high pressure H. R. T.
- 2-100 H.P. 68x16, Standard, H. R. T.
- 1-80 H.P. 68x16 high pressure H. R. T.
- 1-80 H.P. 54x14 high pressure H. R. T.
- 1-50 H.P. 48x120, high pressure, Vertical.
- 1-75 H.P. High pressure Fire Box.
- 1-40 H.P. High pressure Fire Box.
- 2-25 H.P. 42x35, new Vertical, 135 lb. pressure.
- 1-15 H.P. 36x33 new Vertical, 100-lb. pressure.
- 1-10 H.P. 30x33 new Vertical, 100-lb. pressure.

STEAM ENGINES

- 1-26x48 Vilter left hand Corliss engine.
- 1-17x34 x 48 Hamilton, Cross Compound, heavy duty, Corliss, designed for rope drive.
- 1-22x42 Hamilton heavy duty Corliss.
- 1-22x42 Allis heavy duty Corliss.
- 3-18x36 Allis-Chalmers heavy duty Corliss.
- 1-18x16 Lane & Bodley Slide Valve.
- 1-14x18 Erie City Iron Works Automatic.
- 1-13x16 Erie City Iron Works Automatic.
- 1-13x16 Chandler & Taylor Slide Valve.
- 2-10x12 Valley Iron Works Automatic.
- 1-10x12 Chandler & Taylor Slide Valve.
- 1-9x12 Skinner Automatic.

Also many other sizes.

MOTOR GENERATOR SETS

- 2-500 K.W. Westinghouse, 250 volt D. C. 720-lb. 3 phase, 60 cycle, 2300 volt, Synchronous Motor Generator Sets.

ROTARY CONVERTERS

- 2-200 K.W. Westinghouse, 250 volts, D. C., 9 phase, 60 cycle, Rotary Converters.

A. C. MOTORS

No.	H.P.	Make	Volts	R.P.M.
3	Phase, 60 Cycle	Squirrel Cage and Slip Ring.		
12	7½ New	General Electric	220	1800
6	10 New	General Electric	220	1200
2	15 New	Fairbanks-Morse	440	1750
5	15 New	General Electric	220	1200
1	20 Used	Fairbanks-Morse	220	1200
5	20 New	General Electric	220	1200
5	25 New	General Electric	220	1200
1	25 New	G. E. (Slip Ring)	220	1200
1	30 New	General Electric	220	1200
4	40 New	General Electric	220	1200
4	50 New	General Electric	220	900
1	50 Rebuilt	General Electric	220	900
3	50 New	G. E. (Slip Ring)	440	900
8	75 New	G. E. (Slip Ring)	220	900
3	100 New	G. E. (Slip Ring)	220	900
1	100 Rebuilt	Westinghouse	220	1200
2	150 New	G. E. (Slip Ring)	440	720
1	200 Used	General Electric	2200	514
1	250 New	Allis-Chalmers (Slip Ring)	2200	514
1	275 Used	G. E. (Slip Ring)	240	600
1	960 New	G. E. Synchronous	550	720

Also many other sizes and types.

Any of the above 220 volts motors can be furnished for 440 volts, or vice versa.

D. C. MOTORS

No.	H.P.	Make	Volts	R.P.M.
1	50 Rebuilt	Allis-Chalmers	250	800
1	40 Rebuilt	Jantz & Leist	250	800
3	30 Used	Jantz & Leist	250	600
1	20 Rebuilt	Triumph	250	905
1	15 Rebuilt	Minneapolis	110	350
1	12½ Rebuilt	Minneapolis	220	950
1	7½ Rebuilt	Jantz & Leist	220	800
3	5 Rebuilt	Triumph	220	1350
1	5 Rebuilt	Jantz & Leist	220	900
2	4 Rebuilt	Triumph	110	1025

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400 K. W. PLANT A REAL BARGAIN FOR QUICK SALE

2-Used 300 H.P. type T.A. DeLaval Turbines each mounted on common base with and direct connected to 2-100 K.W. each, 80% P.F. Bullock, 3 phase, 60 cycle, 240 volt, 900 R.P.M. Generators making 400 K.W. capacity, either 240 or 480 volts. Units complete with exciters, switchboard instruments, barometric condenser, connecting piping, circulating pumps, vacuum pumps, and accessories. Plant can also be operated non-condensing if desired. Full particulars on request.

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Can furnish random lengths or cut to sketch. Price low for immediate shipment.

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1-Glen Cove 8" 4-side Matcher. 1-Preble 10" 4-side Matcher.
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Boilers, Hoists, Pumps, Engines, Ironwork, Machinery, Belting, Shafting, Pulleys, Hangers.

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ELECTRIC HOIST AND DERRICK \$1600

PRICES F. O. B. CARS, HOG ISLAND, PA.

You Save at Least \$2000

These Hoists and Derricks are standard late models, manufactured by The American Hoist & Derrick Co., St. Paul, Minn. They are almost new, and every one is **GUARANTEED** to be in first-class running order.

The Hoists have two drums and swingers, and are complete with Starting and Control Equipment. Either side or bank control, and rated 6000 pounds single line on each hoisting drum. Slewing rope 36 ft. per minute, and hoisting rope speed 160 ft. per minute. The **MOTORS** are Otis 37 H.P. A.C., 60 cycle, 3 phase, 440 volt, slip-ring induction type and, if desired, may be changed to suit the individual current requirements of purchasers at cost.

DIMENSIONS OF DERRICKS

Mast..... 16 in. square, 40 ft. high.
Boom..... Made of (2) 14 in. sq. timber 48 ft. long spliced to lengths of 80 ft. with (2) $\frac{1}{4}$ in. and (2) $\frac{1}{4}$ in. truss rods.
Stiff Legs. 14 in. sq., 55 and 60 ft. long, or 16 in. sq. 50 ft. long, will furnish either length desired, capacity 5 to 10 tons. Bull wheel 16 ft. dia. Principal sheaves 16 in. dia. and 14 in. single blocks.
The Cable which was formerly used will be given with each purchase of a Hoist and Derrick.

These Hoists and Derricks are assembled on the Grounds at Hog Island and may be inspected at any time. This Equipment is being sold complete and in units of a Hoist or Derrick if desired. Immediate shipment can be made anywhere, but **QUICK ACTION IS IMPERATIVE.**

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Slightly used creosoted pine lumber for sale of the following dimensions.

140 pieces	4" by 8" by 24'
36 "	4" by 8" by 20'
15 "	3" by 8" by 24'
125 "	3" by 8" by 22'
130 "	3" by 8" by 20'
901 "	3" by 8" by 18'
311 "	3" by 8" by 16'
8 "	8" by 16" by 25'
49 "	8" by 16" by 24'
1 "	8" by 16" by 22'
312 "	8" by 16" by 20'
2 "	8" by 16" by 18'
2 "	8" by 16" by 16'
2 "	8" by 18" by 14'
4 "	4" by 12" by 22'
275 "	4" by 12" by 20'
0 "	4" by 12" by 18'
8 "	4" by 12" by 16'
61 "	10" by 12" by 24'
81 "	6" by 12" by 22'
2 "	6" by 12" by 20'
551 "	8" by 12" by 20'
2 "	6" by 12" by 18'
19 "	6" by 12" by 16'
3 "	6" by 12" by 14'
121 "	4" by 8" by 12'
81 "	3" by 8" by 12'
2 "	3" by 12" by 14'
3 "	3" by 12" by 12'
81 "	4" by 16" by 12'
5 "	12" by 12" by 28'
82 "	12" by 12" by 24'
77 "	12" by 12" by 20'
270 "	1 1/2" by 8" by 7' and 1 1/4" by 5 1/4" by 7'

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15 miles 8" 25 pound line pipe 60c. foot; 5 miles 6" line pipe 40c. foot; 200,000 feet 1" pipe 4c. foot; all f.o.b. cars Beaumont, Texas.

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At a bargain for immediate delivery.

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Only a few left from large government surplus equipment, latest type, quick change gear, Le Blond and American 19"x8' bed.

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A splendid assortment of new and slightly used (guaranteed) motors—220-440 volt, A.C., 3 phase, 60 cycle, 5 to 30 H.P., G.E. and Westinghouse at money saving prices. Over 50 in stock, also special bargains in large motors up to 500 H.P.

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Our stock comprises a large and varied assortment of steam and centrifugal, from the smallest to 2000 G.P.M. including a 1000 G.P.M. Wheeler steam underwriters, all good as new at reduced prices.

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Our stock comprises over 500 new steel and Dodge cast split, also new Dodge hangers, shafting, etc., at reduced prices, also thousands of used pulleys and hangers.

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Fifteen complete sets of practically new standard gauge, R. R. switches, 60 lb. rail less than half price.

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1-9 ton American 36 in gauge Saddle
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Rails, Track Material, Steam Shovel, Tanks.

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First Class Equipment

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REBUILT RAILROAD EQUIPMENT

Locomotives—Cars—Coaches
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- 1—7" x 10" 3-Drum D.C. Stroudsburg skeleton Hoisting Engine complete with Swinging Gear attached, good as new.
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65 Ton Baldwin Locomotive

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One (1) second-hand Baldwin Locomotive. Total weight 65 Tons. Cylinders 20x24 inches. Overhauled and repaired to stand United States Government inspection. 165 lbs. per square inch steam boiler pressure.

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Shaft Sinking and other equipment, including Boilers, Steam Shovels, connected and geared Locomotives, Dump Cars, Grouting Machines, Rock Crushers, Screens, Compressors, Feed Pumps and etc. Specifications and prices quoted upon request.

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36" Gauge Locomotives

Good engines—Ready for service

- 1—Vulcan 10x14" 14 ton four wheel saddle tank.
- 1—American 10x16" 18 ton four wheel saddle tank.

Send for specifications and prices.
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- 1—14x24 Baldwin Saddle Tank Standard Gauge Locomotive.
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- 1—Erie B Traction Steam Shovel.
- 1—10 Ton Industrial four-Wheel Locomotive Crane.

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1 cu. yd. railroad type, boom-swing, in good condition, near New Bern, N. C. Price \$4,000.00

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- 20—Ton McMyler Interstate 8 wheel locomotive Crane, standard gauge, 50 foot boom, suitable for two-line bucket work.

Condition first class
Quick Delivery
Price attractive

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FOR SALE FOR RENT HOISTING ENGINES WITH BOILERS

- 3—8 1/4 x 10 D.C., D.D. American, with swinger.
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- 1—7x10 D.C., D.D. American.
- 1—6 1/4 x 10 D.C., D.D. Lidgerwood, with swinger.

WITHOUT BOILERS

- 1—12x18 D.C., D.D. Bacon.
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- 2—8 1/4 x 12 D.C., S.D. Crook.
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- 3—10x12 D.C., S.D. Flory.
- 4—7x10 D.C., D.D. Lidgerwood.
- 1—7x10 D.C., D.D. American.
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- 10—30 H.P., D.D. Electric.

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LOCOMOTIVES

- 2—9x14—36" Gauge Vulcan.
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20—2 1/2-yd. two-way Western Dump Cars.
Pumps, Boilers, Derricks and Concrete Mixers, etc.

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We have for sale one rebuilt No. 1 Merriman 2000 yard One-Car Steam Melting Asphalt Plant. It is in fine condition and we can make good delivery.

Here's your chance to get a real asphalt plant at a price that is right. Better get in touch with us quickly.

The East Iron & Machine Co.
Lima, Ohio.

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Baldwin, Ten Wheel Type Locomotive, 50 tons, Standard Gauge,	
Baldwin, Ten Wheel Type Locomotive, 42 " " " "	
Rhode Island, Forney type " " " "	
Porter Forney type, " 17 " " "	
Baldwin Forney type " 9 " " "	
American, Saddle tank, " 20 " " "	
Porter " " 18 " 36" Gauge,	
Vulcan " " 18 " " "	
Vulcan " " 14 1/2 tons, " " "	
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STEAM SHOVELS

Marion Model 28, 5/8 yard dipper, Mounted Traction Wheels,
Erie Type "B", 3/4 yard dipper, Mounted Traction Wheels,
Marion Model 60, 2 1/2 yard dipper, Mounted Railroad Trucks.

LOCOMOTIVE CRANES

O. & S., 10 tons capacity, Mounted four wheels standard gauge trucks, BUILT 1920, 35 ft. boom. Boiler—Double Riveted butt Strapped, 125 lbs. steam pressure. Double drums for bucket operation.

LET US KNOW YOUR REQUIREMENTS—Locomotives, Steam Shovels, Dump Cars, Locomotive Cranes, Draglines, and other equipment of this class.

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35 gondola cars 60,000 and 80,000 lbs. capacity 25' 7" to 36' long, one and four board high, flat and hopper bottom.
15 box cars, standard gauge, 36 ft., 50,000 lbs. capacity.

All equipped with air and hand brakes.

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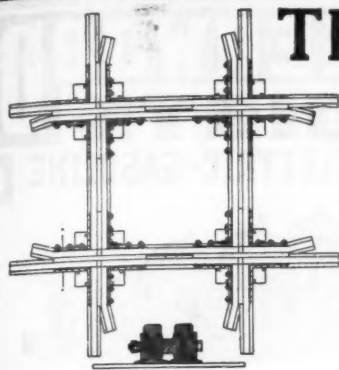
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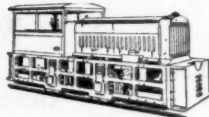
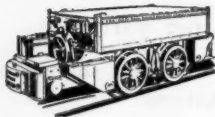


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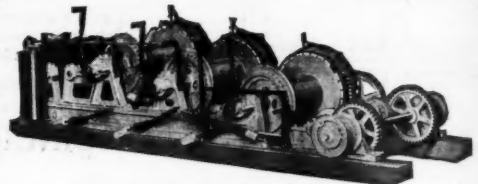


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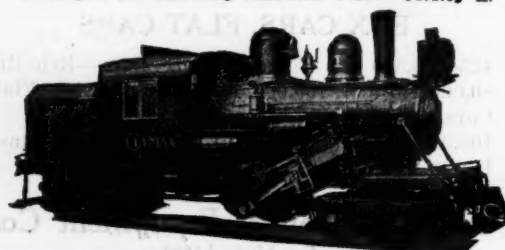


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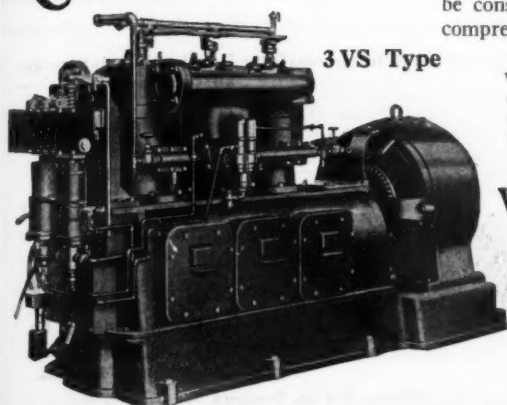


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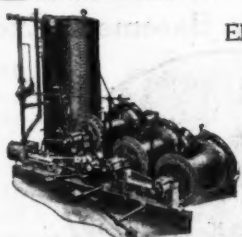
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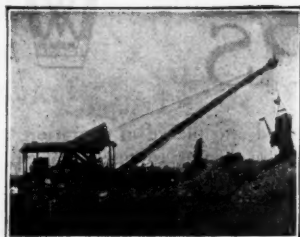
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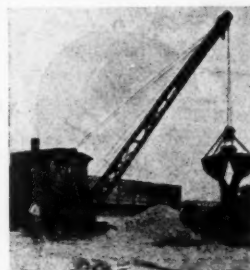
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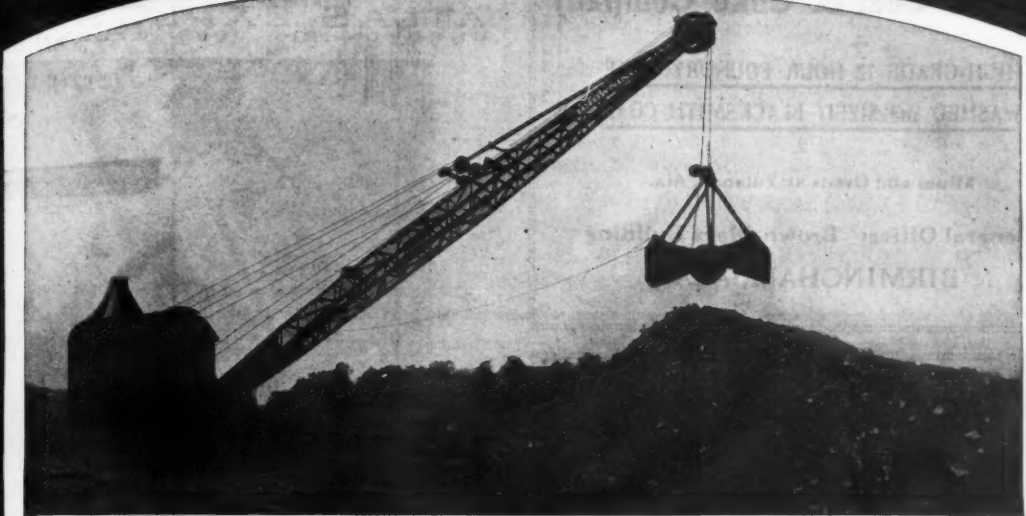
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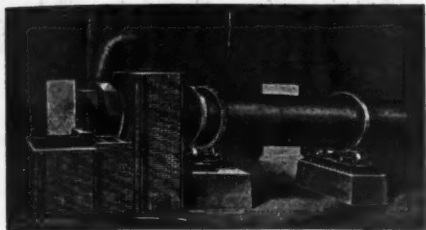
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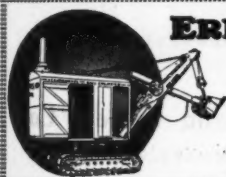
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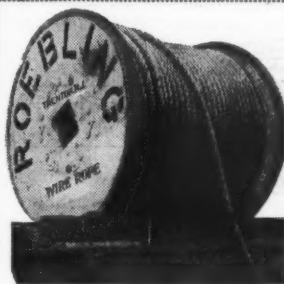


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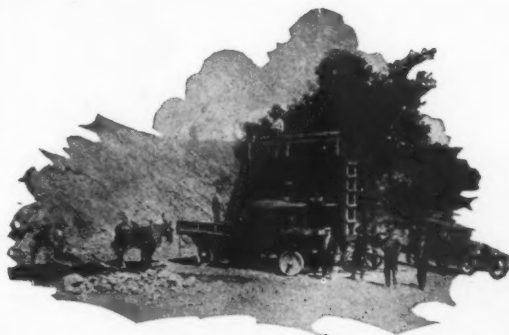
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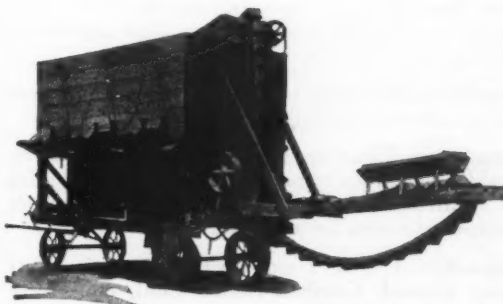
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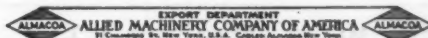
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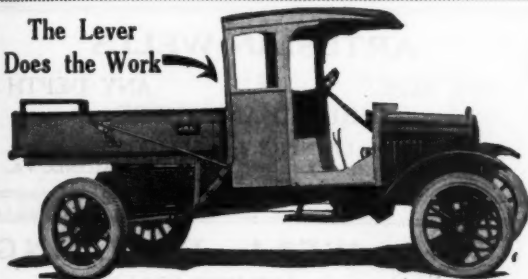
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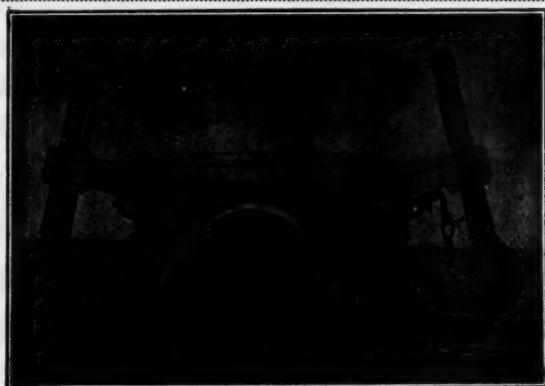
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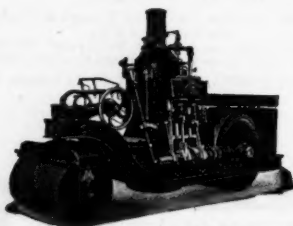
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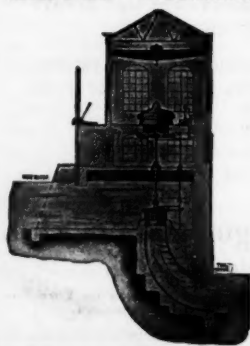
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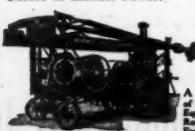
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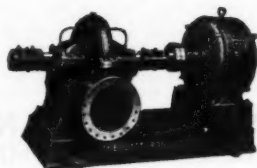
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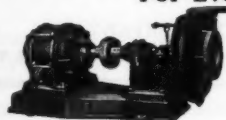


Fig. 267
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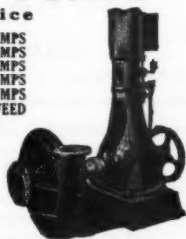
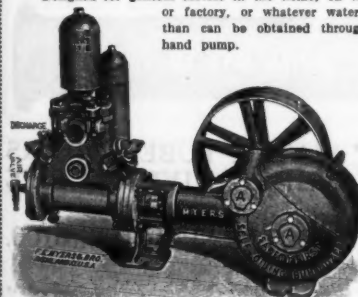


Fig. 239
 ENGINE DRIVEN
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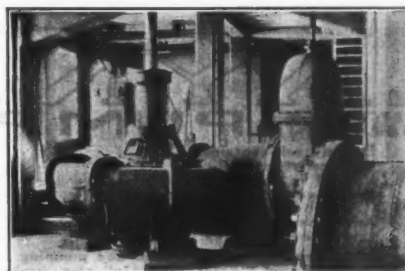


WORTHINGTON



CENTRIFUGAL PUMP TOPICS

No. 13



Worthington Vertical Volute Centrifugal Pump at Yuma, auxiliary project U. S. Reclamation Service, Arizona

84%

The pump shown above is working for the U. S. Reclamation Service, Yuma, Arizona project. The official acceptance test showed a pump efficiency of 84 per cent. (81 per cent. was guaranteed), measured by the latest devices carefully calibrated. This result was obtained when the pump was discharging 72 cubic feet of water per second, under a working head of 72 feet.

If this record stood alone it might not be significant, but couple this performance with the record-breaking duty of the Worthington centrifugal pump at the Mount Royal Pumping Station, Baltimore, Md., and add to this the 128 centrifugals that have during the past year exceeded 80 per cent. efficiency on the Worthington test floor and you get a rather significant array of facts.

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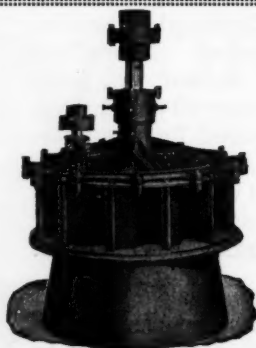
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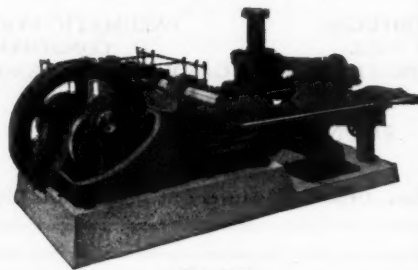


Fig. 1259
5½ x 18" Duplex

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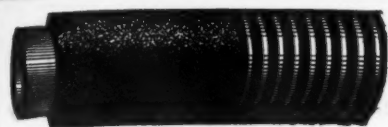
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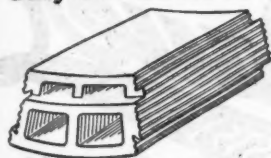
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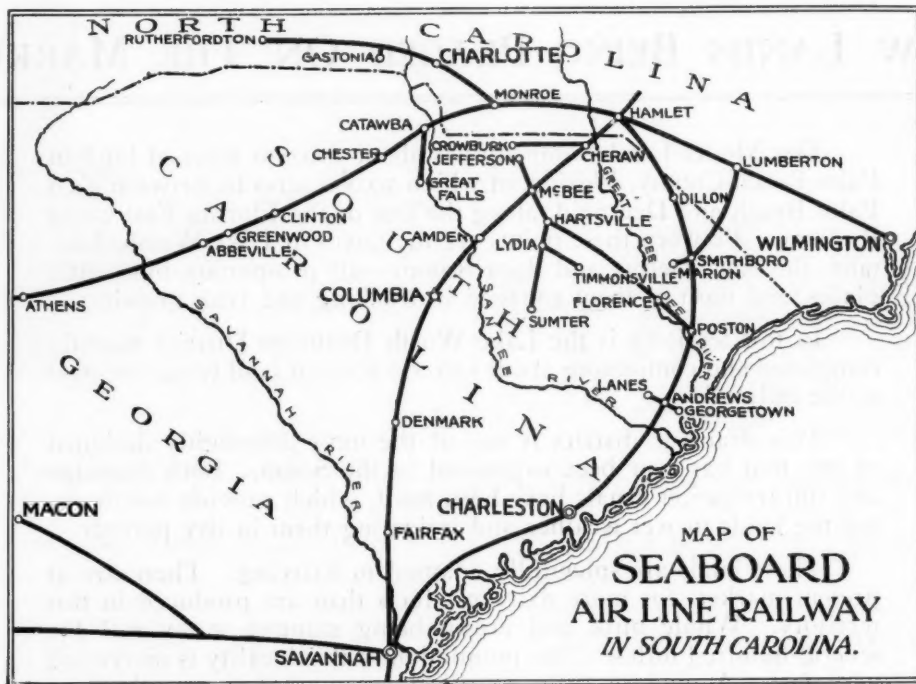
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Jenkins Bros., New York, N. Y.
Ludlow Valve Mfg. Co., Troy, N. Y.

Lunkenheimer Co., The, Cincinnati, O.
Powell Co., The, Cincinnati, O.
Ryerson & Son, Joe, T., St. Louis and New York.

Vogt Mch. Co., Inc., Henry, Louisville.
Westinghouse Traction Brake Co., Wilmerding, Pa.

Wood Drill Works, Paterson, N. J.

York Mfg. Co., York, Pa.

Acid-proof.

Lunkenheimer Co., The, Cincinnati, O.

Gas Producing.

Morgan Construction Co., Worcester, Mass.

Gas Reversing.

Morgan Construction Co., Worcester, Mass.

Gate.

Ludlow Valve Mfg. Co., Troy, N. Y.

VARIABLE-SPEED TRANSMISSION.

Beves Pulley Co., Columbus, Ind.

VARNISH.

Berry Brothers, Inc., Detroit, Mich.
Pittsburgh Plate Glass Co., Milwaukee, Wis.

Truscon Laboratories, The, Detroit, Mich.

VENER CUTTING MACHINES.

Titus, E. E., Petersburg, Va.

VENTILATING APPARATUS.

Engineers' and Contractors.

Allen Engr. & Mfg. Co., Savannah, Ga.
Buckeye Flower Co., Columbus, O.
Buffalo Forge Co., Buffalo, N. Y.

Mechanical.

Advance Company, Richmond, Ind.

VENTILATORS. (Roof.)

Edwards Mfg. Co., The, Cincinnati, O.
Lenderking, Philip H., Baltimore, Md.
Robertson Co., H. H., Pittsburgh, Pa.
Schodinger, F. O., Columbus, O.

VICES.

Western Tool & Mfg. Co., Springfield, O.

VOLTMETERS.

Weston Electrical Instr. Co., Newark, N. J.

WAGON LOADERS.

Austin Machinery Corp., Chicago, Ill.
Bonney Supply Co., Inc., Rochester, N. Y.
Hais Mfg. Co., Geo., New York, N. Y.
Link-Belt Co., Philadelphia, Pa.

Portable Mchry. Co., Passaic, N. J.

WASHING MACHINERY.

Gro and Phosphate.

Bailey-Lebby Co., Charleston, S. C.

Sand and Gravel.

Bonney Supply Co., Inc., Rochester, N. Y.

Link-Belt Co., Philadelphia, Pa.

WATCHMAN'S PORTABLE CLOCKS.

Chicago Watchman's Clock Wks., Chicago.

Eco Clock Co., Boston, Mass.

Newman Clock Co., New York, N. Y.

WATERPROOFING. (For Brick, Concrete, Granite, etc.)

Master Builders Co., The, Cleveland, O.
Sonneborn Sons, Inc., L., New York.

Texas Co., The, New York, N. Y.

Truscon Laboratories, The, Detroit, Mich.

WATER PURIFICATION.

New York Continental Jewell Filtration Co., The, New York, N. Y.

Roberts Filter Mfg. Co., Darby, Pa.

Seafie & Sons Co., Wm. B., Pittsburgh.

WATER-SOFTENING APPARATUS. (Purifying.)

American Water Softener Co., Phila.

International Filter Co., Chicago, Ill.

New York Continental Jewell Filtration Co., The, New York, N. Y.

Seafie & Sons Co., Wm. B., Pittsburgh.

Wayne Tank & Pump Co., Ft. Wayne, Ind.

WATER SUPPLY INSTALLATIONS.

Layne & Bowler Co., Memphis, Tenn.

WATER WELL SCREENS.

McEvoy & Co., J. H., Houston, Texas.

WATERWORKS SUPPLIES AND APPLIANCES.

American C. I. Pipe Co., Birmingham.

Bourbon Copper & Brass Works Co., Cincinnati, O.

Coldwell-Wilcox Co., Newburgh, N. Y.

Columbian Iron Works, Chattanooga, Tenn.

Cook, A. D., Lawrenceburg, Ind.

Glamorgan Pipe & Fdry. Co., Lynchburg, Va.

Hamburg Boiler Works, Hamburg, Berks County, Pa.

Michigan Pipe Co., Bay City, Mich.

Standard Wood Pipe Co., Williamsport, U. S. Cast Iron Pipe & Fdry. Co., Bur-

lington, N. J.

Wood & Co., B. D., Philadelphia, Pa.

WATTMETERS.

Weston Electrical Instr. Co., Newark, N. J.

WELDING.

Blaw-Knox Co., Pittsburgh, Pa.

WELDING APPARATUS.

Electric Arc.

General Electric Co., Schenectady, N. Y.

Oxy-Acetylene.

Kentucky Oxygen-Hydrogen Co., Louisville, Ky.

WELDING ROD.

Mueller Metals Co., Port Huron, Mich.

Well Contractors. (Oil, Artesian, etc.)

Cook, A. D., Lawrenceburg, Ind.

Hughes Specialty Well Drilling Co., Charleston, S. C.

Snyder Pump & Well Co., Richmond, Va.

Va. Mchry. & Well Co., Richmond, Va.

WELL STRAINERS. (Oil, Water & Gas.)

McEvoy & Co., J. H., Houston, Texas.

WELL SUPPLIES. (Oil, Water & Gas.)

McEvoy & Co., J. H., Houston, Texas.

WELL TOOLS AND SUPPLIES.

Cook, A. D., Lawrenceburg, Ind.

Keystone Driller Co., Beaver Falls, Pa.

WHARFBOATS. (Steel.)

Midland Barco Co., Midland, Pa.

WHEELS AND AXLES.

Electric Wheel Co., Quincy, Ill.

WHEEL PRESSES.

Caldwell & Co., E. R., Bradford, Pa.

WINCHES.

Hadfield-Penfield Steel Co., Bucyrus, O.

WINDLASSES.

Hadfield-Penfield Steel Co., Bucyrus, O.

WINDOW FRAMES AND SASH. (Metal.)

Lupton's Sons Co., David, Phila., Pa.

Truscon Steel Co., Youngstown, O.

WINDOW GLASS.

American Window Glass Co., Pittsburgh

WINDOW GUARDS.

Audubon Wire Cloth Co., Audubon, N. J.
Dexter Metal Mfg. Co., Camden, N. J.

Dow Co., Inc., The, Louisville, Ky.

Meyers Mfg. Co., Fred. J., Hamilton, O.

Stewart Iron Wks. Co., Inc., Cincinnati.

WIRE.

All Kinds.

Ryerson & Son, Joe. T., St. Louis and New York.

Barbed Wire, Etc.

Alphabetical Index of Advertisements

<p>A</p> <p>A 270..... 96</p> <p>A-272..... 96</p> <p>Abendroth & Root Mfg. Co. 120</p> <p>Aene Wagon Co..... 24</p> <p>Advance Co..... 24</p> <p>Air-Tight Steel Tank Co..... 17</p> <p>Alabama Company..... 21</p> <p>Albright & Mebus..... 34</p> <p>Allegheny Steel Co..... 20</p> <p>Allen Engineering Co..... 36</p> <p>Allen Eng. & Mfg. Co..... 36</p> <p>Alta-Chalmers Mfg. Co..... 112</p> <p>Allison, Walter A..... 80</p> <p>Allyn & Co., A. C..... 36</p> <p>American Appraisal Co..... 22</p> <p>American Bridge Co..... 22</p> <p>American Cast Iron Pipe Co. 121</p> <p>American Cement Machine Co., Inc..... 27</p> <p>American Cement Tile Mfg. Co..... 27</p> <p>American Creosote Works, Inc..... 28</p> <p>American Creosoting Co. Inc. 28</p> <p>American District Steam Co. 28</p> <p>American Elevator & Mch. Co. Inc..... 31</p> <p>American Enamelled Brick & Tile Co..... 26</p> <p>American Fence Construction Co..... 115</p> <p>American Limestone Co..... 115</p> <p>American Lumber Co..... 31</p> <p>American Machinery Equip. Co..... 104</p> <p>American Pattern Wks. Co. 113</p> <p>American Process Co..... 113</p> <p>American Pulley Co..... 113</p> <p>American Rolling Mill Co..... 30</p> <p>American Saw Mill Machinery Co..... 15</p> <p>Amer. Sheet & Tin Plate Co..... 15</p> <p>American Spiral Pipe Wks. 15</p> <p>American Steel & Wire Co. 15</p> <p>American Telephone & Telegraph Co..... 104</p> <p>Amer. Water Softener Co..... 24</p> <p>American Window Glass Co. 24</p> <p>Anchor Post Iron Works..... 24</p> <p>Anderson Fry & Mch. Co..... 8</p> <p>Anniston Refractories Co..... 8</p> <p>Archer & Co., E. T..... 34</p> <p>Arctic Ice Machine Co..... 9</p> <p>Arco Culvert & Flume Mfrs. Assn..... 104</p> <p>Armstrong & Co., Archer..... 104</p> <p>Armstrong Mfg. Co..... 115</p> <p>Arundel Corporation..... 115</p> <p>Ashland Fire Brick Co..... 34</p> <p>Ashworth, F. K..... 34</p> <p>Asphalt Asso., The..... 30</p> <p>Atkins & Co., E. C., Inc..... 30</p> <p>Atlanta Bolt & Steel Products Co..... 106</p> <p>Atlanta Loco. & Equip. Co. 106</p> <p>Atlanta Terra Cotta Co..... 26</p> <p>Atlanta & West Point R. R. Co..... 86</p> <p>Atlantide, Gulf & Pacific Co. 112</p> <p>Atlas Portland Cement Co..... 112</p> <p>Atlas Powder Co..... 112</p> <p>Audubon Wire Cloth Co. Inc. 112</p> <p>Austin Machinery Corp..... 115</p> <p>Austin Mfg. Co., Thos. F..... 115</p> <p>Austin-Western Road Mch. Co..... 115</p> <p>Automatic Electric Co..... 115</p> <p>Avram & Co., Inc., M. H..... 35</p> <p>Ayres & Miller..... 35</p>	<p>Berger Mfg. Co. of Texas..... 34</p> <p>Berkley, W. N..... 34</p> <p>Berry Bros..... 18</p> <p>Besser Gas Engine Co..... 18</p> <p>Biehle Steel Co..... 18</p> <p>Berkeley Heating Co., Inc. R. C..... 24</p> <p>Biggs Engineering Co., W. E. 35</p> <p>Binney & Smith Co..... 28</p> <p>Binwanger & Co..... 28</p> <p>Birmingham Clay Products Co..... 28</p> <p>Birmingham Realty Co..... 98</p> <p>Birmingham Rail & Loco. Co..... 107</p> <p>Birmingham Slag Co..... 113</p> <p>Black & Veatch..... 28</p> <p>Black River Cypress Co..... 28</p> <p>Blake Lumber Co., Thos. W. 28</p> <p>Blaw-Knox Co..... 28</p> <p>Bliss Co., E. W..... 28</p> <p>Blystone Mfg. Co..... 28</p> <p>Boiler Tube Co. of America 28</p> <p>Bonney Supply Co..... 28</p> <p>Borne, Scrymgeour & Co. 28</p> <p>Bourbon Copper & Brass Works Co..... 122</p> <p>Box 1233..... 69</p> <p>Box & Co., Inc., Alfred..... 111</p> <p>Boxley & Co., W. W..... 115</p> <p>Bridges, Co., Inc., W. C..... 20</p> <p>Brner Hill Steel Co..... 20</p> <p>Broderick & Bascom Rope Co..... 103</p> <p>Brooks Supply Co..... 103</p> <p>Brownell Company..... 103</p> <p>Browning Co., The..... 111</p> <p>Buchanan Co., Inc., C. G..... 32</p> <p>Buckeye Blower Co..... 30</p> <p>Buckeye Machine Co..... 30</p> <p>Buckeye Traction Ditcher Co..... 30</p> <p>Bucyrus Co..... 30</p> <p>Buffalo Forge Co..... 30</p> <p>Buffalo Steam Pump Co..... 30</p> <p>Buffalo Springfield Roller Co. 30</p> <p>Builders Exchange Baltimore..... 104</p> <p>Burkett Sheet Metal Works 30</p> <p>Burrows, E. A..... 36</p> <p>Byers Machine Co..... 109</p> <p>Bylesby Eng. & Management Corp..... 35</p>	<p>C</p> <p>Cabot, Inc., Samuel..... 29</p> <p>Caldwell & Co..... 89</p> <p>Caldwell & Co., E. R..... 12</p> <p>Caldwell & Co., Inc., W. E. 12</p> <p>Caldwell & Son Co., H. W. 12</p> <p>Campbell & Kinsey..... 89</p> <p>Camp & Associates, E. V..... 38</p> <p>Canal Construction Co..... 38</p> <p>Cannell Clay Products Co..... 8</p> <p>Cannell Sewer Pipe Co..... 120</p> <p>Canton Art Metal Co..... 30</p> <p>Canton Culvert & Silo Co..... 30</p> <p>Capital Lift & Mfg. Co., The 30</p> <p>Carborundum Co..... 122</p> <p>Cardwell Machine Co., The 122</p> <p>Carey Co., Thos. F..... 104</p> <p>Carnegie Steel Co..... 34</p> <p>Carolina Engineering Co..... 34</p> <p>Carolina Portland Cement Co..... 28</p> <p>Carrington, T. C..... 96</p> <p>Carter, Ralph B..... 26</p> <p>Carthage Marble & White Lime Co..... 26</p> <p>Castle & Wilson..... 28</p> <p>Central Coal & Coke Co..... 121</p> <p>Central Fdry. Co., The..... 121</p> <p>Central Gulf Lumber Co..... 9</p> <p>Central of Georgia Railway 9</p> <p>Central Pipe & Sup. Co..... 103</p> <p>Casin Bell Co..... 22</p> <p>Champion Bridge Co..... 22</p> <p>Champion Engr. Co., The..... 32</p> <p>Chandler & Chandler..... 32</p> <p>Charleston Dry Dock & Machine Co..... 5</p> <p>Charleston Industrial Corp. 5</p> <p>Charlotte Elec. Repair Co. 5</p> <p>Cheese Metal Works..... 10</p> <p>Chatanooga Armature Wks. 10</p> <p>Chatanooga Boiler & Tank Co..... 17</p> <p>Chatanooga Paint Co..... 30</p> <p>Chatanooga Road Mch. Co..... 30</p> <p>Chatanooga Sewer Pipe Works..... 121</p>	<p>D</p> <p>Chesapeake Belting Co..... 14</p> <p>Chesapeake Iron Works..... 23-32</p> <p>Chicago Bridge & Iron Wks 17</p> <p>Chicago Watchman's Clock Works..... 113</p> <p>Christie Co., L. R..... 113</p> <p>Church & Dwight Co..... 17</p> <p>Chuse Engine & Mfg. Co..... 4</p> <p>Cincinnati Fly Screen Co..... 24</p> <p>Cincinnati Frog & Switch Co..... 107</p> <p>Cincinnati Iron & Steel Co. 107</p> <p>Clark, Jr., Elect. Co., Jas..... 10</p> <p>Clark & Krebs..... 34</p> <p>Classified Opportunities..... 93-94-95</p> <p>Cleveland Belting & Mch. Co..... 102</p> <p>Climax Engineering Co..... 108</p> <p>Climax Mfg. Co..... 108</p> <p>Clinchfield Portland Cement Corp..... 114</p> <p>Cohen & Sons, Louis..... 106</p> <p>Coldwell-Wilcox Co..... 120</p> <p>Cole Mfg. Co., R. D..... 100</p> <p>Coleman Shoemaker Co. Inc. 100</p> <p>Colonial Creosoting Co. Inc. 28</p> <p>Columbia Wagon & Body Co..... 117</p> <p>Columbian Iron Works Co. 122</p> <p>Columbus Conveyor Co..... 6</p> <p>Columbus Forge & Iron Co. 6</p> <p>Columbus McKinnon Chain Co..... 112</p> <p>Commonwealth Pipe & Sup. ply Co..... 103</p> <p>Concrete Steel Bridge Co..... 36</p> <p>Concrete Steel Co..... 20</p> <p>Consolidated Prod. Co..... 104</p> <p>Continental Gin Co..... 9</p> <p>Continental Machinery Co. 9</p> <p>Converse Bridge & Steel Co. 23</p> <p>Cook, A. D., Inc., Adam..... 34</p> <p>Cook & Son, Inc., Adam..... 34</p> <p>Cooper & Co., Hugh L..... 34</p> <p>Copper & Brass Research Asso..... 28</p> <p>Cordale Sash, Door & Lbr Co..... 28</p> <p>Corinth Machinery Co..... 28</p> <p>Cornell-Young Co..... 36</p> <p>Cortright Metal Roofing Co. 36</p> <p>Covington Mch. Co., Inc..... 15</p> <p>Crane Co..... 10</p> <p>Crawford & Slayton..... 35</p> <p>Crescent Materials Co..... 29</p> <p>Cresson-Morris Co..... 13</p> <p>Crocker-Wheeler Co..... 13</p> <p>Crompton & Knowles Loom Works..... 36</p> <p>Crow, Walter Inc..... 32</p> <p>Crocker Steel Casting Co..... 32</p> <p>Cummer & Son Co., F. D..... 113</p> <p>Curtis Bay Copper & Iron Works..... 32</p> <p>Custodis Chimney Construction Co., Alphonso..... 6</p> <p>Cutler Mail Chute Co..... 24</p>	<p>E</p> <p>Draper, E. S..... 34</p> <p>Drouve Co., The G..... 24</p> <p>Druid Oak Belting Co..... 24</p> <p>Dufur, Baggott & Co..... 24</p> <p>Dufur & Co..... 24</p> <p>Dunning & Boschert Press Co..... 122</p> <p>DuPont de Nemours, E. I..... 24</p> <p>F</p> <p>Fairbanks, Morse & Co..... 22</p> <p>Farris Bridge Co..... 22</p> <p>Fawcett Machine Co..... 12</p> <p>Federal Phosphorus Co..... 15</p> <p>Fernholz Brick Mch. Co..... 10</p> <p>First Nat. Bank, Richmond Va..... 89</p> <p>Fleet-McGinley Co..... 13</p> <p>Florida Metal Products Co. 13</p> <p>Floy Mfg. Co., S..... 108</p> <p>Foss Gas Engine Co..... 4</p> <p>Ford, Bacon & Davis, Inc..... 35</p> <p>Forschner, Alfred J..... 106</p> <p>Foster Co., H. M..... 107</p> <p>Foulhoux, J. A..... 34</p> <p>Foundation Company..... 2</p> <p>Frank, M. K..... 106</p> <p>Fraser, Brace & Co..... 36</p> <p>Freeland, Roberts & Co..... 24</p> <p>Freeman Co., Samuel T..... 30</p> <p>Freeport Sulphur Co..... 30</p> <p>Freese & Co., E. M..... 30</p> <p>Frick Co..... 116</p> <p>Friend & Co..... 116</p> <p>Frink, Inc., I. P..... 34</p> <p>Froehling & Robertson..... 34</p> <p>Fuston, Walter J..... 23</p>	<p>G</p> <p>Gallon Iron Works & Mfg. Co..... 117</p> <p>Gardner & Howe..... 34</p> <p>General Electric Co..... 138</p> <p>General Engr. & Const. Co. 138</p> <p>General Motors Truck Co. 138</p> <p>George Construction Co..... 36</p> <p>Georgia Car & Loco. Co..... 105</p> <p>Georgia-Carolina Brick Co. 105</p> <p>Georgia Creosoting Co. Inc. 28</p> <p>Giamorgan Pipe & Fdry Co..... 121</p> <p>Goldens Fdry. & Mch. Co..... 12</p> <p>Goodrich Rubber Co., B. F. 12</p> <p>Good Road Mch. Co..... 90</p> <p>Goodyear Tire & Rubber Co. 90</p> <p>Gordon Metal Co..... 27</p> <p>Gottschall & Co., L. B..... 120</p> <p>Goulds Mfg. Co..... 21</p> <p>Grainger & Co..... 21</p> <p>Grant Supply Co., Chas J. 102</p> <p>Great Southern Lumber Co. 105</p> <p>Greene, John M..... 105</p> <p>Green Fire Brick Co., A. P. 8</p> <p>Greenwood Engr. Co..... 26</p> <p>Gregory Electric Co..... 100</p>	<p>H</p> <p>Haddfield-Pensfield Steel Co..... 30</p> <p>Haise Mfg. Co., Geo..... 118</p> <p>Halsey-Stuart & Co..... 88</p> <p>Hamburg Boiler Works..... 17</p> <p>Hammond-Burd Iron Co..... 120</p> <p>Hammond Heating Co..... 31</p> <p>Hanover Sales Co..... 102</p> <p>Hanchett, Bond Co..... 80</p> <p>Harrington & King Perforating Co..... 34</p> <p>Harris Bros. Co..... 100</p> <p>Hartley Boiler Works..... 10</p> <p>Hauser-Stander Tank Co..... 112</p> <p>Hayward Co..... 112</p> <p>Heine Boiler Co..... 6</p> <p>Heinen, W. F..... 108</p> <p>Helzel Steel Form & Iron Co..... 116</p> <p>Hemphill & Co., Inc. J. L..... 101</p> <p>Hendrick Mfg. Co..... 107</p> <p>Hercules Powder Co..... 113</p> <p>Hersey Mfg. Co..... 113</p> <p>Hill & Griffith Co..... 28</p> <p>Hill Co., George B..... 85</p> <p>Hill, Norman Alan..... 26</p> <p>Hires-Turner Glass Co..... 102-106-107</p> <p>Hitner's Sons Co., Henry A. 102-106-107</p> <p>Hochstadter Laboratories..... 104</p> <p>Holting Machinery Co..... 104</p> <p>Hollander Eq. Co..... 104</p> <p>Hood Brick Co. B. Mifflin..... 96</p> <p>Hookins, T. D..... 6</p> <p>Houston Stanwood & Gamble Co..... 6</p> <p>Howard Refractories Co..... 10</p> <p>Hubbell, Inc., Harvey..... 10</p> <p>Hughes Specialty Well Drilling Co..... 35</p> <p>Hunt & Co., Robert W..... 35</p> <p>Huntington & Curry, Inc. 35</p> <p>Hutten & Schreffler..... 25</p> <p>Hyman-Michaels Co..... 107</p>	<p>I</p> <p>Ideal Electric & Mfg. Co. The 108</p> <p>Independent Pneumatic Tool Co..... 108</p> <p>Indian Alkali Works..... 112</p> <p>Industrial Equipment Co. The..... 108</p> <p>Industrial Lumber Co..... 1</p> <p>Industrial Plants Corp..... 130</p> <p>Ingersoll-Rand Co..... 30</p> <p>International Clay Machine Co..... 30</p> <p>International Filter Co..... 6</p> <p>International Steel & Iron Co..... 23</p>	<p>J</p> <p>Jacksonville, Fla., City Adv. Dept..... 116</p> <p>Jaeger Mach. Co..... 116</p> <p>Jeffrey Mfg. Co..... 116</p> <p>Jenkins Bros..... 117</p> <p>Jennings Automatic Dump Body Co., Inc..... 117</p> <p>Johns-Manville, Inc..... 8</p> <p>Jointless Fire Brick Co..... 8</p> <p>Jones & Laughlin Steel Co. J. T. Tractor Co., The..... 31</p>	<p>K</p> <p>K. C. Elevator Mfg. Co..... 103</p> <p>Kebner, Robert F..... 103</p> <p>Kelly-Springfield Tire Co. 103</p> <p>Kennedy, Arthur M..... 15</p> <p>Kenney Oxygen-Hydrogen Co..... 15</p> <p>Kentucky Rock Asphalt Co. 118</p> <p>Keystone Driller & Supply Co..... 118</p> <p>Kilby Frog & Switch Co..... 107</p> <p>Kimball Bros Co..... 31</p>
---	---	---	--	---	--	---	--	--	---

King, Philip T. 27
Knapport Brick Corp. 27
Klannar Mfg. Co. 40
Kinney Mfg. Co. 116
Kirby-Bonner, Lumber Co. 2
Klaff & Co., C. 2
Klein & Co., Nathan. 100
Kyles, B. H. 34
Knoxville Iron Co. 19
Koehring Co. 19
Kies & Sons, Henry A. 103

L

Laclede Steel Co. 18
Lancaster Iron Works 1
Lase Mfg. Co. 1
Larow Printing Co. 88
Lau 105
Layne & Fowler Co. 120
Lebow Bros. Co. 103
Lee, Wm. S. 34
Lefel & Co., James 118
Lehman, Chas. T. 105
Lenderking, Philip H. 1
Leschen & Sons Rope Co., A. 40
Lavis & Co., Henry 108
Lida, Martin J. 34
Lidgerwood Mfg. Co. 108
Liek Belt Co. 1
Liquids Despatch Line 1
Lockhaven Brick & Tile Co. 26
Lombard Iron Works & Supply Co. 12
Long Bell Lumber Co. 1
Long Co., M. A. 34
Lovelace W. Y. 100
Lutlow Engineers, The 35
Lutlow-Saylor Mfg. Co. 24
Lutlow Valve Mfg. Co. 122
Luttwiel-Celadon Co. 27
Luehrs Co., The Daniel M. 34
Lukens Steel Co. 5
Lunkenheimer Co. 5
Luton's Sons Co., David. 34
Luten, Daniel B. 34
Luter, Clark A. 34

M

McCalla Co., Harold 34
McCalla & Co., J. B. 34
McClave-Brooks Co. 7
McClintic-Marshall Co. 22
McCrory Co., J. B. 35
McDevitt-Fleming Co. 34
McEvoy & Co., J. H. 40
McEwen Lumber Co. 28
McGinnis & Co., N. C. 34
McGowan Co., John H. 118
McGowan-Lyons Hardware & Supply Co. 100
McIntirey Co. The 100
McLanahan-Stone Mch. Co. 32
McMillan, A. 34
McRae Lumber Co. 24
McWilliams Co., Inc. 34
Maclean Scaffolding Co. 1
Macon Concrete Roller Co. 1
Mala, Chas. T. 34
Mal-Gra Casting Co. 118
Mallory Mch. Corp. 99
Manhattan Perf. Metal Co. 1
Manistee Iron Works Co. 118
Marblehead Co., The 34
Marine Bank & Trust Co. 1
Marine Metal & Sup. Co. 102
Marion Steam Shovel Co. 113
Markel, F. E. 36
Maryland Metal Building Co. 21
Maryland Trust Co. 89
Master Builders Co. 1
Mayer, F. 34
Meade & Co., Richard K. 34
Medart Mfg. Co., Fred 12
Medart Co., The 12
Meas & Meas 36
Mehan Co., Andrew I. 99
Mercantile Trust & Deposit Co. 1
Mercer Co., G. A. 88
Merchants Manufacturers Assn. 97
Meyers Mfg. Co., Fred J. 12
Michigan Pipe Co. 121
Mid-Continent Equipment & Machinery Co. 104

Midland Barge Co. 1
Midvale Steel & Ord. Co. 34
Milburn, Heister & Co. 34
Miles Machinery Co. 1
Miller & Co., G. L. Inc. 37
Minter Homes Co., The 37
Mitchell-Tappen Co. 22
Model Land Co. 123
Moersch-Edwards Corrugating Co. 24
Moffatt Mch. Mfg. Co. 31
Monaghan Machine Co. 1
Monro Warrior Coal & Coke Co. 1
Moore Dry Kiln Co. 1
More-Jones Brass & Metal Co. 12
Morgan Construction Co. 15
Morgan Millwork Co. 28
Morris Machine Works. 118
Morrison Co., Hackley 104
Morse Agricultural Service. 12
Morse Chain Co. 12
Mott's Sons, Geo. F. 101
Mount, W. D. 35
M. O. & W. Engineering Corp. 34
Mueller Metals Co. 1
Mundt & Sons, Chas. 117
Mundy Holting Engine Co. 1
J. S. 109
Murphy's Hotel 1
Murray Iron Works Co. 1
Myers & Bro. Co., F. E. 119

N

Nashville Ind. Corporation 100-103-104
National Blow Pipe & Mfg. Co., Ltd. 1
National Cast Iron Pipe Co. 121
National Cement Co. 114
National Hoisting Engine Co. 110
National Pressed Steel Co., The 1
National Steel Fabric Co. 140
National Steel Rail Co. 106
National Transit Pump & Mch. Co. 120
National Tube Co. 1
New Jersey Fdry & Mch. Co. 7
New Jersey Wire Cloth Co. 24
New York Continental Jewell Filtration Co., The 6
New York Machinery Co. 99
Newman Clock Co. 1
Nicholson File Co. 40
Niles-Bement-Pond Co. 12
Nixon-Hasselle Co. 105
Norfolk Equipment Co. 105
Northern Fire Apparatus Co. 1
Northwest Engineering Wks 110
Nussbaum, & Co., V. M. 100
Nuveen & Co., John. 89

O

O'Brien & Yost 1
O'Brien Machinery Co. 101
O'Connell Brick & Tile Co. 1
Ohio Refractories Co., The 8
Ohio Steel Foundry Co., The 32
Oliver Iron & Steel Co. 33
Oliver, W. J. 105
Olson, O. 34
Opnulis & Hill Inc. 34
Orton & Steinbrenner 110
Osgood Co. 1
Otis, R. R. 1
Owen Bucket Co. 112
Owensboro Sewer Pipe Co. 1

P

Pacific Flush-Tank Co. 1
Packard Motor Car Co. 1
Parks Ball Bearing Machine Co., The 1
Parkes Engineering Co. 35
Parsons, Klapp, Brinckerhoff & Douglas 35
Patten Mfg. Co. 1
Pawling & Harnischfeger 110
Pennsylvania Drilling Co. 36
Pennsylvania Pump & Compressor Co. 110
Pensacola Creosoting Co. 29
Petersburg Sand & Gravel Corp. 115

Petroleum Iron Works Co. 121
Pfannmueller Engineering Co. 1
Phoenix Iron Co. 23
Photostat Corp. 1
Pipe & Contractors' Supply Co. 102
Pittsburgh-Des Moines Steel Co. 16
Pittsburgh Machinery & Equipment Co. 105
Pittsburgh Plate Glass Co. 1
Pittsburgh Steel Co. 1
Pittsburgh Testing Laboratory 35
Platt Iron Works. 119
Plymouth Cording Co. 12
Portable Machinery Co. 116
Porter Co., H. K. 108
Portland Cement Ass'n. 1
Portsmouth Refractories Co. 8
Posey, James 36
Pottstown Steel Co. 100
Powell Co., Wm. 1
Power Mfg. Co. 1
Power Specialty Co. 6
Pratt & Whitney Co. 1
Prentiss & Co., Inc. Henry 102
Probert Sheet Metal Co. 1
Progressive Mfg. Co. 33
Proposal Advertisements. 91-92

R

Racine Tool & Machine Co. 1
Raleigh Wyoming Coal Co. 105
Randle Machinery Co. 101-101
Raymond Bros. Imp. Pul. Co. 32
Raymond Mfg. Co., Ltd. 15
Reading Chain & Block Corp. 1
Reed & Ducker 1
Reeves Pulley Co. 1
Reflectolite Co., The 25
Regas & Co., J. R. 34
Reid, J. G. 21
Reilly Mfg. Co., J. J. 21
Rennberg & Sons Co., Edw. 113
Republic Iron & Steel Co. 99
Republic Iron Works 1
Richards-Wilcox Mfg. Co. 1
Richmond Fireproof Door Co. 40
Richmond Structural Steel Co. 23
Rider-Brisson Engine Co. 119
Ridgway & Son Co. 31
Ridley Fdry & Mch. Co. 36
Roach & Stansell 36
Roanoke Iron & Bridge Works 22
Roberts Filter Mfg. Co. 91
Robertson Co., H. H. 27
Roberts, Furman & Murphy 89
Robins & Co., A. K. 1
Robins Conveying Belt Co. 112
Robinson & Co., Dwight P. 35
Robinson & Orr 106
Robinson & Son Co., Wm. C. 1
Roebliar's Sons Co., John A. 113
Roemstiel Co., The Lewis S. 89
Rust Engineering Co. 6
Ryerson & Son, Jos. T. 1

S

Salem Fdry & Mch. Wks 88
Sales Corp. The 1
Samsler Bros. Co. 1
Samsen Cordage Works 1
Sanders & Sweeney 1
Savanna Refining Co. 35
Savannah Bros 110
Savannah Blow Pipe Co. 1
Savannah Creosoting Co. Inc. 29
Scales & Sons Co., Wm. B. 6
Schoedinger, F. O. 1
Schiffeld Iron Works 1
Seaford Engineering Co. 35
Scranton Forging Co. 32
Seaboard Air Line 124
Security Bank Note Co. 99

Seeger Machine Tool Co. 101
Septic Tank Co. 88
Seyfert's Sons, Inc., L. F. 106
Seymour, Wm. 99
Sharon Pressed Steel Co. 20
Sharpsville Boiler Works 102
Shearer, C. E. 34
Shepard Electric Crane & Hoist Co. 14
Sherwood, E. C. 105-106
Shreveport Blow-Pipe & Sheet Iron Works, Ltd. 1
Silverman Co., W. H. 89
Singer Iron & Steel Co. 106
Sirrine & Co., J. E. 1
Slayton & Co., W. L. 89
Smith Co., Oscar T. 88
Smith Co., S. Morgan. 120
Smith Co., The 35
Smith-Courtney Co. 14
Smith Gas Engineering Co. 23
Smythe Co., S. R. 36
Snead Architectural Iron Works 23
Sonnenborn Sons, Inc., L. 1
Southeastern Constr. Co. 34
Southern Creosoting Co., Ltd. 1
Southern Cypress Manufacturers' Assn. 1
Southern Hotel 1
Southern Ice Machine Co. 8
Southern Iron & Equip. Co. 107
Southern Metal Co. 1
Southern Mosaic Tile Co. 26
Southern Pine Association 1
Southern Sheet & Tin Plate Co. 1
Southern States Port. Cem. Co. 114
Southern Steel Products Co. 23
Southern Steel & Rolling Mill, Inc. 18
Southern Wood Preserving Co. 29
Southside Fdry & Mch. Wks 1
Spiker & Loe 36
Standard Cement Construction Co. 27
Standard Rail & Steel Co. 106
Standard Wood Pipe Co. 121
Stanley Lumber Co., H. F. 1
Starrett Co., L. S. 14
Steel, John A. Jr. 34
Steels & Sons, J. C. 30
Stevens Bros. & Co. 1
Stewart & Co., Paul 1
Stewart Iron Works Co. 1
Stone & Webster, Inc. 1
Strand & Co., N. A. 1
Stroudsburg Engine Works. 100
Structural Slate Co. 1
Sullivan Machinery Co. 1
Sun Shipbuilding Co. 1
Swedish Venetian Blind Co. 1
Sydnor Pump & Well Co., Inc. 115

T

Table of Contents 39
Tait Godfrey, M. S. 35
Taplin-Rice-Clerkin Co. 4
Tarr, Louis A. 1
Tennessee Coal, Iron & R. R. Co. 19
Tennessee Copper Co. 113
Texas Co. 1
Texas & Pacific Railway Co. 98
Texoma Oil & Refining Co. 14
Thomas Grate Bar Co. 1
Tins Foundry & Mach. Co. 1
Title Guarantee & Trust Co. 89
Titus, E. E. 1
Todd & McCullough 88
Toomey, Inc., Frank 99
Traylor Engin'g & Mfg. Co. 1
Treadwell Construction Co. 23
Triumph Electric Co. 1
Truscon Laboratories 6
Truscon Steel Co. 3
Tucker & Laxton 85
Turner Architectural Service 34
Turner, C. A. P. 34
Turner Co., C. 110

U

Union Drawn Steel Co. 17
Union Mining Co. 8
Union Sulphur Co. 32
United Iron Works, Inc. 1
Universal Concrete Products Co. 27
Universal Machine Co. 14
Universal Road Mch. Co. 118
U. S. Cast Iron Pipe & Fd. Co. 121
U. S. Salvage & Equip. Co. 1

V

Vendor Slate Co. 27
Vilter Mfg. Co. 8
Virginia Bridge & Iron Co. 23
Virginia Mch. & Well Co. 118
Virginia Steel Supply Co. 18
Vogt Machine Co., Inc. 8
Vonnegut Hardware Co. 1

W

Wagner Elec. Corp. 11
Wallace & Crenshaw 34
Walsh Fire Clay Prod., Co. 8
Walsh & Weldner Boiler Co., The 17
War Department 1
Warner Petroleum Co. 1
Warren Bros. Co. 1
Warsaw Elevator Co. 1
Waterbury Mfg. Co. 1
Wayne Tank & Pump Co. 91
Weber Co., F. 107
Weir Frog Co. 36
Weiss, B. M. 105
Weller, Francis R. 34
Weller Mfg. Co. 33
Westbrook Elevator Co., W. J. 31
Westbrook Elevator Mfg. Co., Inc. 31
Western Tool & Mfg. Co. 1
Westinghouse Electric & Mfg. Co. 1
Westinghouse Traction Brake Co. 109
Weston Electrical Instr. Co. 1
West Virginia Rail Co. 106
Wetherill & Co., Inc., Robt. 1
Wheeling Steel Products Co. 20
Whitcomb Co., Geo. D. 108
White Engineering Corporation, The J. G. 25
White, Gilbert C. 34
Whitlock Cordage Co. 1
Wicks Machinery Co. 110
Wickwire Spencer Steel Corp. 1
Widmer Engineering Co. 1
Wier Lumber Co., R. W. 1
Wiley & Co., Inc. 24
Wiley & Wilson 24
Wilfong Iron Works Co. 1
Willard F. 1
Willard-Bogge & Co. 106
Williams Brick Co., Inc. F. 1
Williams, Henry O. 31
Williams Patent Crusher & Pulverizer Co. 1
Williamsport Wire Rope Co. 1
Willis W. N. 34
Wilson Co., The 1
Wilson & Co., E. H. 1
Wilson Corp., J. G. 1
Wilson Tank & Culvert Co. 104
Wise & Co., Harold G. 89
Wood Drill Works 1
Wood & Co., R. D. 122
Wood & Lane Co. 1
Wood Iron & Steel Co., Alar 18
Wood, P. W. 108
Wood's Sons Co., T. B. 13
Woodford Wood Tank Mfg. Co. 1
Worthington Pump & Mch. Corp. 119
Wright Mfg. Co. 14
Wyckoff & Son Co., A. 121

Y

Yolande Coal & Coke Co. 112
York Mfg. Co. 9
Young & Selden Co. 1
Youngstown Sheet & Tube Co. 1

Z

Zamolski, Jos. M. 12
Zelicker Sup. Co., Walter A. 104
Zouri Drawn Metals Co. 36

MARKED * NOT IN THIS ISSUE
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Classified Opportunities

Page 92-91-95

Proposal Advertisements

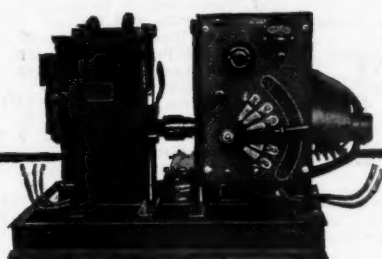
Page 91-92

Achievement

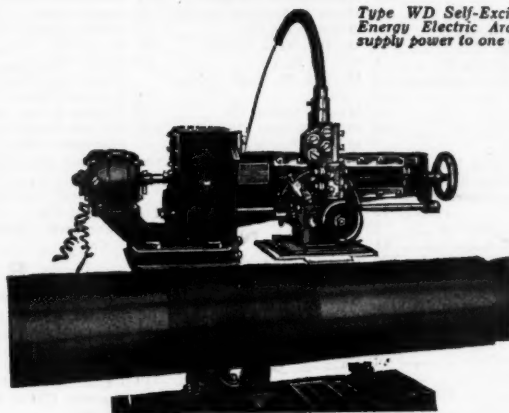
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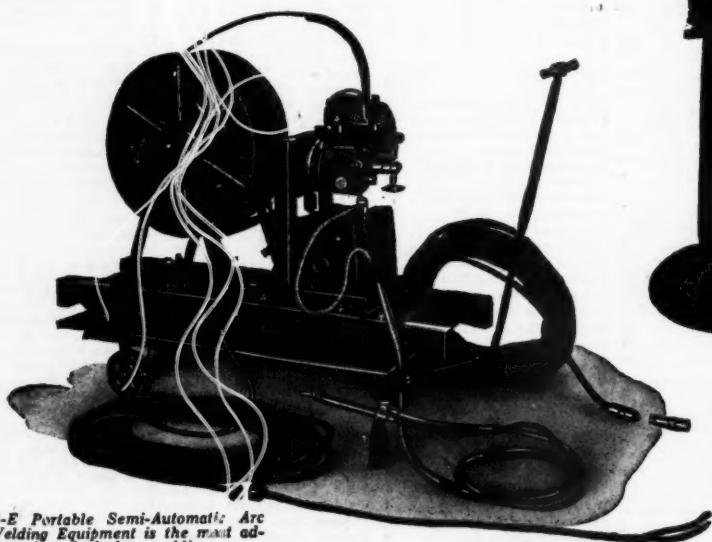
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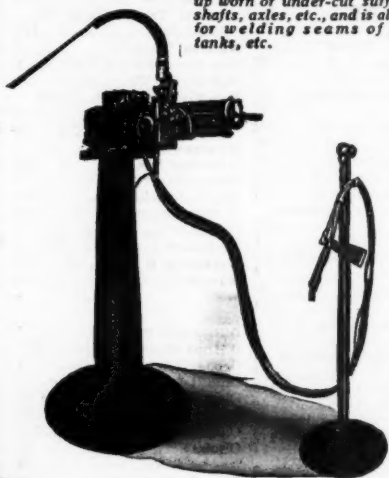
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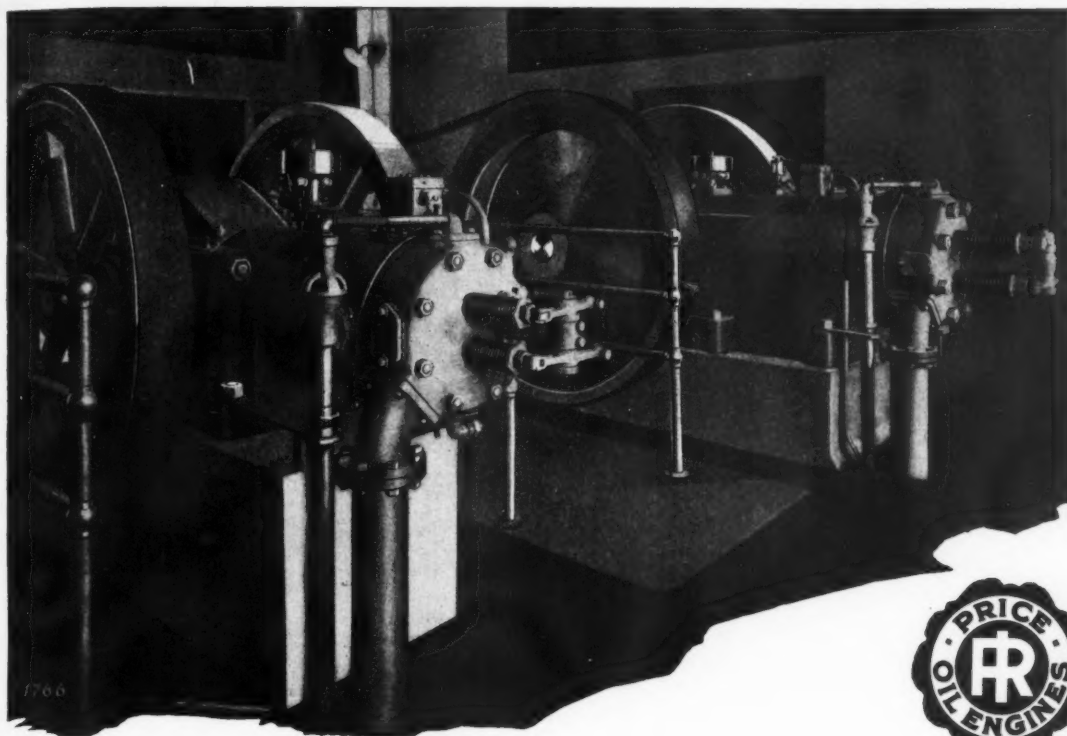
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The Price Oil Engine is an innovation in power engine design and construction. It employs direct injection of fuel. There is no expensive high pressure air compressor taking up valuable floor space and costing real money to run.

The guaranteed fuel economy of the Price Engine tells the story—0.45 pounds per brake horse power at full and three-quarter loads, using any oil which can be handled successfully in the Diesel Air Injection Engine.

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The illustration shows the Price Oil Engine to be a monument to simplicity, ruggedness and accessibility.

Bulletin 10,004

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